INSTRUMENTS and AUTOMATION

Published Monthly by The Instruments Publishing Company
845 Ridge Ave., Pittsburgh 12, Penna.

INDEX TO VOLUME 31, 1958

H before page number denotes **Handbook and Buyer's Guide** (Part Two of October issue).

Issue	Pages	Issue	Pages
January	1- 194	July	1121-1272
February	195- 366	August	1273-1450
March	367- 560	September	1451-1596
April	561- 724	October	1597-1740
May	725- 958	November	1741-1902
June	959-1120	December	1903-2033

SUBJECT INDEX

A

Acceleration Pickup 137, 894, 896, 1098, 1236, 1421
Acceleration Pickups, Torque Generator Linear 507
Acceleration and Rate Generator, Angular 690
Acceleration Recorders 1558, 1567
Acceleration Switch 137
Accelerator, Industrial 339
Accelerator, Particle 1252
Accelerometer 1852
Accessories for Strip-Chart Recorders 163
Actuator 1094
Actuator, Electric 329
Actuator, Rotary 329
Actuator, Step-Action 1251
Actuators, Linear 700
Addaverter, Model B 1162
Aging Tester, Elastomer 690
Airborne Commutator 1426
Airborne Tape Devices, Miniaturized Electronics for 1076
Aircraft Equipment, Environmental Testing Failures in Missile and 1198
Aircraft Propulsion Control System Simulation at GE-Evendale, Summary of 1066
Air Flow Testers 135
Air Gage, Multiple 907
Air/Gas Cleaner 1878
Air Monitor 343
Airspeed and Altitude Field Test Set 171
Airspeed & Static Pressure Indicator 896
Alarm, Clogged Air Cleaner 177
Alarm and Scanning System, Automatic 1080
ALNICO 5Cb 990
All-Electric Positioner 1939
Alpha and Beta Counter 1100
Alpha Counting Converter 1569
Alphanumeric Printer 303
Alternator, Brushless 173
Altitude Pressure Table 1485
American Standard Specifications for Automatic Null-Balancing Electrical Measuring Instruments 836
Ammeter, V-O-M/Clamp-On 1856
Ammeter, Heavy-Current DC 1243
Ammeters, R-F 522
Amplifier 938, 1097
Amplifier, Booster 1096
Amplifier, DC 340, 695, 916
Amplifier Decade 163
Amplifier, Differential DC 917
Amplifier, Magnetic 1855
Amplifier, Maser 1855
Amplifier, Measurement 324, 523
Amplifier, Packaged 1244
Amplifier, RF 674, 938
Amplifier, RF Power 1100
Amplifier, Servo 1244
Amplifier, Subminiature 1091
Amplifier, Tape 1097
Amplifier, Transistor 1244
Amplifier, TWT 1564
Amplifier, Wide-Band 1096
Amplifiers, Linear 696
Amplifiers, Pickup Carrier 1429
Amplifiers, Pulse Magnetic 1483
Amplifiers, Wide-Band Voltage Sum & Difference 523
Analog Computer 126
Analog Computer Component 671
Analog Computer, Evaluation of Series Summations on the 1064
Analog Computer Simulation of Electrohydraulic Control Systems 297
Analog Computers, Mathematical Elements for 1832
Analog-to-Digital Converter 1068
Analog-to-Digital Converters as Applied to Simulation Systems 119
Analog-to-Digital Data Processor, Transportable 126
Analysis of a Pyrolysis Process 654
Analyzer, Automatic Wave 1076
Analyzer Coulometric 1230
Analyzer, Dissolved Oxygen 1080
Analyzer, Flue-Gas 129
Analyzer, Power 320
Analyzer, Process Characteristic 862
Analyzer, Transient Response 1076
Analyzers, Colorimetric 129
Analyzers, Dual Channel 158
An-Dig Converter and Digital Voltmeter 126
Anemometer Cell 504
Aneroid Manostat 42
Angles in Shop, Measuring 344
Angular Accelerator 909
Angular Divider 513
Angular-Position Encoders and Systems 764
Angular Position Pickup 507
Annunciator 2015
Annunciator, Contactless 1392
Annunciator Systems 498
Annunciators, Miniature 1080
Anti-Intrusion System 146
Apparatus, Glass 1254
Applications of Delay Lines 1679
Applications of Flow Graphs to Analog Computer Programming 1063
Applications of Humidity Control 1208
Approach Indicator, Low 1254
Argon Purity Analyzer 129
Armored Bundled Tubing 1712
Armored Instrument Tubing 1934
Assemblies, Thermocouple 1234
Astronomical Telescope, Low-cost 538
Attenuators, Pushbutton Carrier Voltage 520
Auto Collimator 1402
Automated Analysis 2014
Automatic Analytical Balance 2003
Automatic Analytical Chemistry 1624
Automatic Batcher 1880
Automatic Checkweigher 2003
Automatic Electric Tester 910
Automatic Emergency Valves 1053
Automatic Flow Control 1564
Automatic Go No-Go Sequence Tester 912
Automatic Processor, "Mini-Rapid 16" 1930
Automatic Reader for Precision Balances 1972
Automatic Reading and Analysis of Charts 856
Automatic Shaker System 1700
Automatic Shut-Off Valves for Gas and Oil Transmisison Lines 1373
Automatic Soap-Batching System in Synthetic Rubber Production 1920
Automatic Timer 1556
Automation Exposition Clinic Classes 614
Automation Exposition, Russian Exhibit Keynotes Fourth International 1185
Automation Shares—A Mutual Fund 1480
Automatized Production Line Inspection and Correction 668

B

B-58 Vertical Velocity Instrumentation 1840
BDSA Outlook for Scientific and Industrial Instrument Industry 1662
BTU Meter, Model 913, 1770
Balance, Automatic Recording Analytical 682
Balance, Explosion-Proof 315
Balance, Semi-Automatic 315
Balances, Micro 315
Balancing 934
Balancing Machines 689
Basic Types of Delay Lines 1676
Batch Weighing with Load Cells 1976
Batcher, Gravimetric 1085
Batching Scale 1881
Batching System 901
Bath, Refrigerated 1253
Battery Charger, Selenium 763
Battery Chargers 172, 337
Battery Eliminator and Charger 6-v and 12-v 341
Bearing, Linear Instrument 927
Bearing, Open Linear Ball 926
Bearings, Precision Ball 926
Bell Jar Unit, High Vacuum 539
Bellows Expansion 700
Bench Type Tester 1710
Bi-Metal Thermometer 1699
Binary Counter 508
Binary Resistance Set 1161
Biographies of Significance, 49, 416, 783, 1180, 1489, 1944
Bismuth, Ductile 705
Blade Edge Microscope 341
Blast Furnace Instrumentation 256
Blocking Oscillators 327
Blowers, Centrifugal 1098
Boiler Water Columns 1706
Bond Tester, Internal 318
Bonding-agent Syringe 536
Book Reviews 436, 1026, 1328, 1503, 1645, 1781, 1955
Bore Gage Kit, Dial 905
Bore Telescope 507
Bourdon Tubes for P-V-T 410
Brake, DC 707
Breadboard Parts 1248
Bridge-Balance and Calibrating Units 756
Bridge Balance Unit 915
Bridge Calibration, Series Versus Shunt 648
Bridge Calibrator 1573
Bridge, Universal 321
Briefs 28, 234, 396, 594, 756, 984, 1150, 1306, 1480, 1620, 1769, 1930
Bright Pilot Light 1414
British Industrial Measuring and Control Apparatus Manufacturers' Association 378
Buffer, Transistorized 127
Burettes, Semi-Automatic 903
Butterfly Valves 2014
Butterfly Valves, R-S 1771

C

C-R Tubes, Spiral Banded 324
Cabinets, Building-Block 316
Cabinets, Counter Height Instrument 341
Cable Armor 924
Cables and Connectors, Microminiature 699
Cables, Multiconductor 705
Cables, Teflon Coax 330
Calculators, Desk 1834
Calendar, Scheduling 500
Calibrating Bath 2005
Calibration Program, Metering Problems in The Navy 1214
Calibrator, Strain Gage 28
Calibrator, Transducer 1882
Calibrator, Voltage and Current 517
Caliper, Vernier 938
Cam Assembly, Adjustable 927
Camera Lens 1239
Camera, Low-Cost TV 1306
Camera, 3-Way Focusing 1571
Camera, 35mm 173, 536
Camera, Ultraspeed 886
Cameras, High-Speed M-P 1239
Cams, Adjustable 927
Canadian Industry—its likes, needs and attitudes 1515
Cans, Corrosion-resistant Wax-lined 538
Capacitance Bridge 1404, 1718
Capacitance as a Means of Measurement and Control 1841
Capacitance Units, Decade 697
Capacitor, Vibrating 1860
Capacitor Winding Machine 316
Capacitors 538
Capacitors, Coaxial 919
Capacitors, Computer Grade 705
Capacitors, High Voltage and Deflection Yoke 341
Capacitors, Microminiature 705
Capacitors, Miniature 541, 1862
Capacitors, Solid Tantalum 707
Capacitors, Variable 526
Capping Valve, Digester 1563
Carrier-current Transmitter 136
Carrier Preamplifier 695
Carrier System, 3 KC 313
Cases for Plug-in Units 685
Cathode-Ray Indicators, Large-Screen 322
Cathode-Ray Recorder 323
Cathode-Ray Tube 916
Cement Sampler Kit 705
Cements for Strain Gages, High Temperature 907
Centralized Operations Control 768
Centrifuge, Precision 933
Ceramic Cement for High-Temperature Pickups 317
Chambers of Commerce Appeal to Instrument Industry 384
Chambers, Salt Spray Fog 1228
Chart and Curve Instruments 1824
Chart-Data Processor 126
Chart Folding Machine 163
Chart for Logarithmic Mean Temperature Difference 1623
Chart Pen 886
Chart Viewer 1570
Charts, Automatic Reading and Analysis of 856
Chemical Feeder 504
Chlorine Analyzer 130
Chopper 707
Chopper, Connector-Mounted 1096
Chopper, DC-AC 916, 1247
Chopper, Low-Thermal External-Coil Miniature 694
Chopper, Solid-State 1092
Chopper, Transistorized 1480
Chromatograph, Gas 1080
Chromatrograph, Hi-Speed 540
Chromatograph Readout 511
Chromatograph Scanner, Paper 682
Chromatographic Process Stream Analyzer, Chroma-Cat 1772
Chromatography Cell 892
Chrome Plating Unit 1086
Circuit Indicators, Flag Type 1625
Circuit Tester, Igniter 1567
Circular Chart Recorders 1552
Clamp, Hinged 927
Clamps, Nylon 175
Classroom T & V Control 502
Cleaners, Ultrasonic 152, 934
Clock, Automatic 1092
Clock, Digital 150
Clock, Digital Logging 1073
Clocks, Instrument Panel 540
Closures 527
Clutch-Brake 1246
Clutch-Brake, Duplex 935
Clutch-Brake, High Speed 1100
Clutch-Brake, Magnetic 537
Clutches and Brakes 529, 532
Clutches, Electric 938
Clutches, Miniature 698
Coating-Thickness Gage 905
Coax Components 1246
Coaxial Seamless Tube, Shielded 541
Coefficients, Computation of Orifice-Meter Gas 1537
Coil Form, RF Shielded 529
Coil Winder, Toroidal 1240
Coincidence Reading System 594
Color Analyzer 1427
Color Filling and Printing Machine 934
Color Film Developing Tanks 536
Color Stamping Press 152
Colorimeter 1255
Colorimeter, Photoelectric 511
Combined Analog-Digital Simulation 1543
Combustible-Gas Alarm 1080
Combustion Controllers 668
Commutation Switch Development 1368
Comparator, Illuminated 1240
Comparator, Metals 1240
Comparator, Self-checking 154
Comparator Set, Dial 1240
Compartment Cases 1719
Compensating Head, Three-Light Additive Color 932
Components, Military Standard Test Methods for 1210
Computation of Orifice-Meter Gas Coefficients 1537
Computer, Analog 1076
Computer Center, New 980
Computer Control Stations 2013
Computer-Controlled Pilot Plant 1688
Computer-Controlled Pilot Plant Speeds Research on Processes 378
Computer Data Preparation by Implicit Synthesis 654
Computer Designs Cams 234
Computer, Digital Control 534
Computer Efficiency, Environmental Prerequisites for 1204
Computer, Electronic 302
Computer Events 424, 304, 491, 655, 881, 1067, 1226, 1390, 1550, 1696, 1850, 1997
Computer Language Translator 494
Computer for Missiles 304
Computer Patchboards 1079
Computer Reliability?, What Price 1039
Computer, Sports Car "Rally" 1620
Computer, State Government Leases 1758
Computer, Transportable 126
Computer, Typewriter 497
Computers for Control of Manufacturing Processes, Soviet Trends in 1810, 1960
Computers in the Process Industries Theory Vs Practice 90
Computers?, Who Uses Medium Size 1827
Computers will Thin Faster 1920
Computing Galvanameter 324
Computing Indicator 302
Computing Link, An-Dig 496
Computing Relay 1392
Computing with the Small Computer, Decentralized 476
Computing Transfer Oscillator 692
Conductivity Cell 128, 539
Conductivity Measurement, Solution 1936
Conduit, Flexible 1248
Connector Kit 704
Connector, Multicontact 1247
Connectors, Miniature 166
Connectors, Miniature Rack & Panel 331
Connectors, Multiple 166
Connectors, Printed Circuit 330, 699
Connectors, Waterproof 331
Consotrol 1998
Contact Assemblies 1859
Contactless Annunciator 1392
Contact-Making Instrument 1230, 1552
Contact Meter Control 403
Contact-Type Wattmeter 1568
Contactors and Relays, DC 175
Contacts, Meter 175
Continuous Gas Analyzer 1706
Control Board, Visual 1704
Control for Drill Presses, Etc., Automatic 130
Control, H & V 1096
Control Modules 669
Control, Proportional 984
Control Relay for LVDTs 892
Control of Subway Ventilation 1209
Control Switch, Photocell 1854
Control System, Experimenting 668
Control System, Level 1874
Control System, Temperature Limit 1234
Control Systems 1879
Control Unit, Non-Contact 1861
Control Units, Electric 128
Control Valve, Sludge 1416
Control Valve, Springless 1698
Control Valves, BMV 1570
Controller, D/P 1429
Controller, Illumination 1426
Controller, Indicating and Recording 1854
Controller, Liquid Level 1401
Controller, Pneumatic 128
Controller, Radiation Pyrometric 1719
Controllers, Temperature 133, 308, 894, 1392
Converter 537, 707
Converter, A/D 1709
Converter Camera has 10^{-9} Sec Exposure, Image 1942
Converter, Frequency-to-Voltage 1396
Converter, High Speed Voltage-to-Digital 497
Converter, Kinetape 1878
Converter, V/D 1552
Converter, Voltage-Digit 362
Cooling Effect Detection and Control Systems 173
Core Plan Tester 1706
Core Tester 690
Cores, Computer Bobbin 1240
Corrosion Tester 1254
Coulometric Analyzer 1230
Count Controller 1238
Count-Down Timer 149
Count Rate Meter 1558
Counter, Add-subtract 150
Counter/Controller 1552
Counter, Decade 936
Counter and Digital Readout, Frequency-Period 1427
Counter, Hydraulic-Action 509
Counter, Low-Torque 1074
Counter, Preset Impulse 1074
Counter, Quick Reset 1074
Counter Readout 508
Counter, Single-Decade 151
Counter, Small Parts 1086
Counter, Small Stroke 174
Counter and Timer 313
Counter-Timer 899
Counter, Transistorized 1858
Counters, Electric 900
Counters, Megacycle Decade 682
Counters, Multi-Purpose 680
Counters, Photoelectric 1074
Counters, Predetermining 509, 1427
Counters, Preset 680, 1884
Counting-device Booster 177
Couplers, Quick Connect 468
Couplings, Bellows 531
Couplings, High-Rating 531
Couplings, Miniature 331, 700
Crimping Tool, Contact 537
Cryostat for Precise Temperature Control 1612
Crystal Filters 1712
Crystal-Growing Furnace 535
Crystals, Scintillation 706
Culture Apparatus 174
Curve Instruments, Chart and 1824
Current Limiter 915
Custom Bellows 1410
Cute Tricks in Simulation 1691
Cylinder Valve 1556
Cylinder Valve, Oxygen 1862

D

DART Project, History of the 651
DBM/DBA Meter 537
D-C Amplifier 1706
DC Current Transducer 914
DC Power Supply 1555

DDA 1836
Dall Flow Tube, Plastic 1083
Data Blocs and Data-Pacs 986
Data Handling System 1068
Data Logging System 1879
Data Plotter, Electronic 704
Data Printer 1238
Data Processing—Automatic Error Correction, Break-through in 1138
Data Processing System 126
Data-Processing System, All-Transistor 1076
Data Processing Systems, Electronic 444
Data Processor, Desk Top 1716
Data Processor, Rapid 1238
Data Systems, Electronic 1771
Data Translators 1079
Decade Boxes 1855
Decade Delay Line 1426
Decade Scaler 1070
Decade Voltage Dividers 163
Decentralized Computing with the Small Computer 476
Decoder, Binary-to-Decimal 1070
Deformation Tester, High-Rate 767
Degausser 173, 1416
Dehumidifier 533
Dehydrator, Low-Cost 1567
Dehydrators 408
Deionizers, Plastic 702
Delay Generator 2010
Delay Line Applications, Recent 1680
Delay Line, How to Buy A 1682
Delay Line Test Unit 1704
Delay Lines 1697, 1698
Delay Lines, Applications of 1679
Delay Lines, Basic Types of 1676
Delay Lines, Electrically-Variable 920
Delay Lines, Phase Relations in 1675
Delay Lines, Variable 921
Delay Relay, Thermal 508
Delay Relays, Subminiature 1555
Demagnetizer, Tape 1099
Demineralizer 170
Demonstrator, Magnetic-Field 336
Density Gage, Fluid 890
Density Gaging with Gamma Radiation 1480
Density Measuring System 129
Derivative Via Integration 1525
Desk Calculators 1834
Detail Press 1553
Detergent for Ultrasonic Cleaning, Liquid 316
Dew-Point Apparatus 1394
Dewpoint Controller 1708
Dewpoint Indicator 1392
Dial Indicator 1870
Dial Rotation Monitor 1864
Dials, Verniers, Etc. 928
Diaphragm Pump 1853
Dielectric Test Set 320, 690
Differential Incremeter 1769
Differential Pressure Transmitter 142
Differential Producer Throats 1312
Differential Transformer 2013
Differentials 331, 2015
Differentials, Miniature 531
Digiswitch 1312
Digital Automation—No. 27 476
Digital Automation—No. 28 1032
Digital Automation—No. 29 1526
Digital Automation—No. 30 1863
Digital Blocks, 5-Mc 1310
Digital Buffer Storage 2006
Digital Building Blocks 1854
Digital Circuits 1879
Digital Circuits, Transistor 1620
Digital Clocks 1073
Digital Comparison Bridge 1070
Digital Computer, Extremely High-Speed 1238
Digital Control Valve 1045
Digital Converter 670
Digital to DC Voltage Converter 1068
Digital Dials 1428
Digital Differential Analyzers 992
Digital to Digital Converter 1068
Diigtal Display Device 1070
Digital Indicator 1861
Digital Input-Output System, Automatic 936
Digital Magnetic-Tape Recorder-Reproducers 1070
Digital Modules 234
Digital Ohmmeter 1856
Digital Printers 671, 990
Digital Readout 1068
Digital Readouts, Display-Type 1663
Digital Recorder 302
Digital System Plugboard 1073
Digital Systems 1068
Digital Totalizer and Readout 936
Digital Voltmeter 915
Digital Voltmeter, AC DC 1073
Digital Volt-Ohmeter 1422
Digital X-Y Recorder 304
Digitizing Equipment for Mass Spectrometers 304
Digitrol Building Blocks 1930
Digiverter—A Digital Readout Converter 1038
Diode Board 1246
Diode, Multi-purpose Silicon 344
Diode Tester 541
Diode & Transistor Tester 911, 938
Diode Tube, Cold-Cathode 920
Diodes, Silicon 175, 327, 697, 705, 919
Direct-Reading Attachment for Spectrograph 888
Direct-View Storage Tubes 1408
Disc Brake 1868
Displacement Pickup, H-T and Explosion-Proof 505
Displacement Pickup, Micro 934
Displacement Pickup with Self-Aligning Shaft 1236
Displacement Pickups 145, 894, 1096, 1236, 1417
Displacement System 1866
Display-Type Digital Readouts 1663
Distillation-Column Dynamic Characteristics 1457
Dollies 1569
Dosimeter Charger, Transistorized 345
Dosimeter, Personnel 1252
Drafing Applique Material 345
Draftsman's Template 1255
Drill Attachment 1087
Dual-Beam 'Scope 938
Dual Solenoid Inlet Valve 1412
Dual Switch Temperature Controller 1397
Duplicator Paper Roll for Teletypewriter 533
Dynamic Check of Turbo Prop Engine Simulation 1066
Dynamic Performance Computer for Gas Turbine Engines 1066

E

Economics of Systems Engineering 95
Edge Position Control 280
Electric Control-Valve Operators 111
Electric Counter 1866
Electric Eyes, Miniaturized 1152
Electric Heating Elements 768
Electric Valve Positioner 1702
Electrical Interference 1046
Electrical Measuring Instruments, American Standard Specification for Automatic Null-Balancing 836
Electrical Testers 1574
Electrohydraulic Actuator, Weighing While Conveying 1978
Electrohydraulic Valve Actuator 28
Electrolysis Recorder 886
Electrometer 314, 1090, 1100
Electronic Circuit Cooler 1702
Electronic Circuitry 474, 860, 1070, 1371, 1529, 1668, 1831, 1987
Electronic Commutator 2009
Electronic Control Systems 2002
Electronic Controls 1552
Electronic Density Probe 1982
Electronic Snow Gaging 1758
Electronic Tel-O-Set 2000
Electroverter 986
Eliminating Noise at Gas Meter Stations 661
Ellipsometer 1398
Elongation Testers 2008
Emergency Valves, Automatic 1053
Encapsulation Material 316
Encoders and Decoders 673
Encoders, Digital Shaft Position 143
Encoders, Shaft Position 670
Engine Analyzer 516
Engine Indicator-Analyzer 680
Enlarger 342
Envelope Delay Meter 1710
Environment Connectors, Extreme 1229
Environment Test Chamber 156, 908
Environmental Chambers 690, 1700
Environmental Chambers, Shut-off Valve for 1228
Environmental Equipment Developments, Recent 1666
Environmental Prerequisites for Computer Efficiency 1204
Environmental Test Chamber 1698
Environmental Test Unit 1701
Environmental Tester 1228
Environmental Testing Failures in Missile and Aircraft Equipment 1198
Environmental Testing, New Concepts in 1192
European Instrumentation and Automation, Publisher's Report on 106
Evaluation Factors for Recorders 841
Evaluation of Series Summations on the Analog Computer 1064
Evaporator 1095
Event Recorders 324
Events 25, 253, 428, 608, 789, 1011, 1171, 1323, 1497, 1649, 1784, 1947
Events Counter 1720
Expendable TC 1884
Experience of an Instrument Manufacturer with Systems Engineering 84
Experimenting Control System 668
Explosion Proof Annunciator, Miniature 1492
Explosive Valve 1715
Exposure Meter 177

F

Fabricated Plastic Cases 1414
Fatigue Test Machines 157
Fatigue Testers 318
Fault Detector 319
Fault Locator, Cable 703
Feedback Circuit, Dynode 599
Feeders, Vibratory 594
Ferrite Duplexer 922
File, Diamond 926
Filling Machine, Liquid 135
Film Comparison Viewer 1862
Filtering Elements 936
Filter-Separator 339
Filters, Narrow-Bandwidth 1853
Filters, Plastic Transparent 342
Fitting, Improved Stainless 1100
Fittings, Compression 700
Fittings, O Seal 532
Flat Motor 1715
Flatness Tester 906
Flexible Couplings 1864
Flexible Shaft, Extra-heavy Duty 177
Floatless Level Control 1852
Flood Affects You 1294
Flow Alarm, Electronic 396
Flow Colorimeter 1480
Flow Control Valve 1249, 1564
Flow Controller 1699
Flow Indicator 1721
Flow & Level Transmitter for Hard to Handle Fluids 678
Flowmeter, Anti-Corrosion 678
Flowmeter, Differential-Pressure 396
Flowmeter, Impeller 1864
Flowmeter, Magnetic 369, 678
Flow Meter, Variable Area 134
Flowmeter, Indicating 1236
Flowmeters, Heavy-Duty 28
Flowmeters, 1000: 1 Range 897
Flow-Rate Indicators 896, 1408
Flow-Rate Transmitter 1083, 1775
Flow Regulator 1236, 1857
Flow Switch 1878
Flow Switch, Precision 343
Flow Switches 135, 1236
Fluid Controls Institute Meets 980
Fluid Filtration 984
Flurometer 512
Force Applicator, Short-Stroke 329
Force Calibration 2009
Fractionating Distillation Apparatus 1398
Freezing-point Depression Apparatus 536
French Mission Meets with I&A Staff 1128
Frequency Changer 541
Frequency Converters 673, 1429, 2011
Frequency Converters, High-power 541
Frequency Counters 1097
Frequency Indicator 1415
Frequency Marker 912
Frequency Measurement 536
Frequency Meter and Frequency-error Detector, Combined Expanded-scale 340
Frequency Meter and Generator 1761
Frequency Monitors 674
Frequency-Period Counter and Digital Readout 1427
Frequency Standard 518, 1417
Fuel Measuring System 310
Function Generator 1872
Function Generator, Multi Variable 1818
Furnace, Electric 176
Furnace, Salt Bath 176
Furnace-Tube-Wall TCs 1872
Furnace, Vacuum Annealing 139
Furnace, Vacuum Arc 1255
Furnaces, Electric Bench 1086
Furnaces, Electric Bench-type 344

G

Gage Blocks 706
Gage, Ram-Force 898
Gages, Long Bourdon Tube 1552
Gaging System 317
Gaging Transducer, Ultrasonic 155
Gain Control, Automatic 1091
Galvanizing Instrumentation, Continuous 278
Galvanometer 1090
Galvanometer Amplifier 1091
Galvanometer Analyzer 1560
Galvanometer, Computing 324
Galvanometer, General-purpose 558
Galvanometer, 3-Unit 159
Gamma-Intensity Recorders 1718
Gamma Sources 902
Gas Analyzer, Combustible 198
Gas Analyzer, Thermal Bridge 176
Gas Analyzer, Thermal Conductivity 198
Gas Analyzers 304, 1419, 1562
Gas Analyzing System 1250
Gas Blender 304
Gas Chromatograph 2012
Gas Chromatography Cells 1870
Gas Detector 1860
Gas Mask Guard 1702
Gas and Oil Transmission Lines, Automatic Shut off Valves for 1375
Gas Regulators 1702
Gas and Vapor Flow Meter 1558
Gate Valve 1415
Gaussmeter, Transistorized 695
Gear Box, Motorized 924
Gear Pitch Gage 938
Gear Reducer 530
Gear Set, Experimental 530
Gear-Train Analyzer 909
Geiger-Mueller Tube 1398
Generator, Diode Function 1577
Generator, Double-Pulse 1242
Generator, Induction 933
Generator, Pneumatic Function 1862
Generator, Time-Mark 177
Generators 342
German Automation Study Team Confers with Staff of I&A 1294
Germanium Junction, Large 526
Glossmeters and 45° Reflectometer 541
Glow Lamp 1098
Goniometer, Precision 686
Go-No-Go Gage, Electronic 888
Gordon Research Conference 1294
Governor 936, 1236
Graphite Rupture Disks 1312
Great Britain's I.E.A. Exhibition 978
Grinder Gage 155
Grinding Spindle 705
Grounding Switch 1857
Guide Computer Goes on-Line, Operating 1612
Gyro Test Turntable 1570

H

Hairsprings, Vacuum Heat-Treated 11
Hall Effect Devices 1864
Hall Generator, Semiconductor 582
Hand Sighting Level 1402
Hand Tachometer 1713
Hardness Tester 155, 907
Headers and Receptacles 925
Heat Control, Stepless 893
Heat Exchangers 1426, 1429
Heavy-Duty Motor 1858
Height Gage 317
High-Current Supply 1100
High Impedance VTVM 1429
High-Rate Tester 1416
High Resolution n-m-r Spectroscopy 756
High-Speed Analog Computers 601
High-Speed Bagging 2006
High-Speed Commutator 1398
High-Speed Diffusion Pump 1876
High-Temp Resistors 1707
High Temperature Strain Gates 460
High-Temperature TC 1872
High-Vacuum-Jacketed Transfer Lines 1254
High-Voltage Test Sets 1404
High Voltage Testers 934
Hi-Temp Converter 1408
Hoist Safety 704
Hollow-Shaft Differential 1712
Hood, Transparent 1253
Hook-On Recording V-A 1563
Hot Box Detector 1234
Hot Plate and Stirrer 1864
Hour Meter 1716
Hour Meter, DC 174
Hour Meters 680
Humidity Control, Applications of 1208
Humidity Instruments 1870
Humidity-Proof Pot 935
Humidity Recorder 309
Humidity and Temperature Recorder-Controller 1082
Humidity-Test Cabinets 517
Huntington Beach Steam Station 1988
Hydraulic-Action Counter 509
Hydraulic-Fluid Tester 1241
Hydraulic Test Stands 318, 689
Hydraulic Weighing 1930
Hydrocarbons Alarm, Excess 340
Hydrostatic Tester 909
Hygrothermograph 535

I

ISA Conference and Exhibit [illegible]
I.S.A. Show, 15th 1660
ITV System 1700
Ignitron 1098
Illuminated Magnifier 1718
Impedance Comparator 1562
Incubators, Anaerobic 1253
Indicating & Dial Light Assortment 1577
Indicating Instruments 913
Indicating and Recording Controller 1874
Indicator Lamp Assemblies, Subminiature 146
Indicator Light Assemblies, Miniature 146
Indicators, Edgewise 322
Indicators and Recorders 888
Inductance Decades 1564
Induction Heat Generator 1402
Inertia Switch 137
Infinite Resolution VDR 1717
In-Line Display 1068
Input-Output Equipment 2010
Input Output System 303
Input Units 496
Inquiries 9, 203, 375, 572, 735, 973, 1131, 1282, 1466, 1606, 1753, 1913
Inspection Glass 704
Inspection System, Fill 1878
Instant Reset Delay Relay 148
Instant Reset Timer 142
Instrument Air 1622
Instrument Fuses 703
Instrument Pivots 596
Instrument Shields 1565
Instruments, Edgewise 692
Instruments, 300° Scale 692
Insulation Tester 517, 1712
Integration 1828
Integrator for Chart Recorders, Miniature 524
Integrator, Continuous 130
Integrator, Electronic 127, 660
Integrator, Jackman Van Winkle 1942
Integrator, Time Function 1772
Intercom 1000, 1952
Interference, Electrical 1046
Internal Diameter Gage, Precision 154
Interrelationship of Analog and Digital Computers 487
Inventions Wanted 1524
Inverter, Static 706
Irradiation Sources for Industry 639
Isolator, Ferrite 176
Isotopes Used for Research 245
ITV 1097

J

Jig Borer Microscope 1088
Journal of the SCMA 111, 293, 483, 661, 872, 1060, 1214, 1378, 1537, 1688, 1841, 1998

K

Keyboard Perforator 534
Keyboards, Job Designed 1070
Kinetape Converter 1878
Klystron 1100

L

Lab Stop Watches 1398
Lacquer, Panel 1100
Lack Units, Recorder for 668
Lamp, Transistor Circuit 1098
Lamps, "Atomic" 345
Lamps, Indicating 146, 931
Lathe-Cut Rings 540
Lathe, Portable 1099
Lathe, Swedish Copying 938
Layout Instrument Scale 1088
Lead in air Detector 342
Leak-Detection System 907
Leak Detector, Liquid 670
Leak Detectors 336, 1240
Lens Curve Generator 513
Lens, Telephoto 1239
Lens, Universal 342
Letters to the Editor 6, 200, 372, 566, 729, 964, 1126, 1278, 1456, 1602, 1748, 1908
Level Control, Boiler Drum 872
Level Control, Floatless 1852
Level-Trol, Electronic 1769
Light Amplification 410
Light Dimmers, Lightweight 1100
Light-Fading Tester 682
Light Source 702
Light Source, Point 932
Lighting Control 2012
Lighting Sets, Low Voltage 342
Linear Acceleration Pickups, Torque Generator 507
Linear Amplifier Kit 1575
Line Voltage Regulator 1570
Linear Velocity Transducers 32
Lines, High Vacuum Jacketed Transfer Lines 1254
Liquid Filler, Recycling Attachment for 897
Liquid Level Controller 504
Liquid-Level Gage, Glassless 151
Liquid level Gage, Magnetic 151
Liquid Nitrogen Refrigerator, Portable 171
Load Cell 1097
Load-Cell Calibrator 1084
Load Cells, Batch Weighing in 1976
Load Cells, Low-Capacity 1878
Load Cells, Precision Strain gage 537
Load Control 539
Load and Frequency Control Shows Role of the Instrument Manufacturer in Systems Engineering 98
Load Isolator 327
Lock Washer Terminals 1856
Locking Clips 331
Logarithmic Converter 1577
Logarithmic Translator 163
Logic System Modules 1877
Log-Linear Recorder 522
Low-Level DC VTVM 323
Low-Pressure Standard 1419
Low-Resistance Rheostat 1409
Low-Temperature Probe 1082, 1868

M

M-G Sets 350
Mag Amp Controls 935
Mag-amp-reg VR 177
Mag Tape Splicer 1558
Magnetic Amplifier 1875
Magnetic Clutches 1873
Magnetic Core Buffer 1073
Magnetic Core Memory 494
Magnetic Field Demonstrator 336
Magnetic Flowmeter 236
Magnetic Inspector 170
Magnetic Metal Inspector 1712
Magnetic Shift Register 302
Magnetic Strain Gage?, Why Use A 1150
Magnetic Switch, Miniature 1721
Magnetic Tape Handler, Digital 342
Magnetic Toggle Relay 1721
Magnetizers 316
Magnetohydrodynamics 384
Magnetostrictive Ferrites 1096
Magnistor 238
Manometer, High Precision 677
Manometer, Photo- 1233
Manometer, U-Type 1084
Marker Generators, Range 706
Marking Machine, Metal 1086
Mass Flowmeter 1717
Material Programming, Bulk 1985
Math Tools, Simple 1809
Mathematical Elements for Analog Computers 1832
Mechanical Reference Generator 127
Medical Gas Analyzer 139
Megamegohmmeter 321
Megohmmeter, Portable 322
Memory, Magnetic Core 494
Memory, Rapid-Access 495
Mercury Switch 1406
Meter, Gamma Beta Survey 1868
Meter Relay 340
Meter Telemetering, Positive Displacement 1462
Metering Problems in The Navy Calibration Program 1214
Metering Pump 310
Metering Valve Kit 1429
Microfilm Printer 1571
Microminiature Voltage-Dividing Resistor 165
Micrometer, Inner Groove 1088
Microminicam 338
Microphone, Precision 338
Micro-Projector 686
Micro-Rule 1625
Microscope 1573
Microscope, Measuring 689
Microscope, Microinch Surface Finish 154
Microscope Projector-Comparator-Camera 507
Microscope, Research 315
Microscope, School 538
Microscope, Scratch 1240
Microscope, Stereo 904
Microscopes, Teaching 536
Microwave Circulator 1572
Military Standard Test Methods for Components 1210
Millivolt Source 1415
Millivoltmeter, RMS 1406
Miniature Connectors 1706
Miniature Microsyn 1408
Miniature Recorder 1875
Miniature Resistors 1875
Miniature Rheostat 1874
Miniature Speedlight 1412
Miniature Surface TC 1854
Miniature System 1909
Miniature Wirewound VDR 1567
Miniature Wiring Duct 1704
Miniaturized Electronics for Airborne Tape Devices 1076
Mini Rapid 16" Automatic Processor 1936
Missile and Aircraft Equipment, Environmental Testing Failures in 1198
Missile Data Processing, GE System Speeds 578
Missile Tape Recorders 304
Model B Addaverter 1162
Modular Lab Cabinets 1559
Modular Test Equipment 1728
Modules, Transistorized Circuit 1162
Moisture Meter 1392
Moisture Monitor 1556
Moisture-Vapor Transmission Testing 1201
Molded Parts, Miniature 700
Monitor Consoles 500
Monitor, 24-Station 1882
Monitoring Systems 7002
Monitors, Room-Air 700
Monochromatic Source 139
Motion Analyzer 1878
Motion Indicator 1557
Motion Transmission 145
Motor, Actuator 166
Motor Alternator 174
Motor, Battery-Operated 1418
Motor Brake 923
Motor Controller 312
Motor Current as a Process Indication 293
Motor, Gear Head 1100
Motor Generator 1715
Motor Generators and Rotary Converters 539
Motor Governor 1870
Motor, Miniature AC 166
Motor, Miniature DC 236
Motor, Rectangular P M 1417
Motor, Reversible Sub-FHP 166
Motor, Right Angle 1092
Motor, Rotary Air 1251
Motor, Size 10 1425
Motor, Small 935, 1096
Motor, Sub FHP 1861
Motor, Synchronous 1713
Motor Tachometer 1709
Motor Tester, Electric 690
Motor, Two-Way Stepper 1251
Motors, Hysteresis 344
Motors, Instrument 703
Motors, Small High-Torque 698
Motors, Sub-FHP 705
Movable-Vane Flowmeter 1620
Moving-Coil Forms 1087
Multichannel Plotter 495
Multichannel Timer 1568
Multicoder 313
Multi-Conductor Cable 1860
Multicoupler, VHF 1100
Multiple Recorder, Rapid 494
Multiplexer, Pulse-duration Modulated 674
Multiplier, KVM 163
Multiplier Phototube 1571
Multipoint Recorder, Flexible 1552
Multipointer Gage 1856
Multi Variable Function Generator 1819

N

Nameplates 174
National Bureau of Standards Semiannual Progress Report 742
Needle Valves, Forged 1885
Neutron Survey Meter 510
New Concepts in Environmental Testing 1192
New Glamor Subject 1662
New Plants and Mergers 178, 346, 542, 708, 940, 1102, 1256, 1430, 1578, 1722, 1886, 2016
News 10, 206, 378, 582, 742, 978, 1138, 1294, 1468, 1612, 1758, 1920
News Bits 208, 384, 584, 744, 1141, 1296, 1470, 1614, 1760, 1922
Noise Figure Meter 1090
Noise at Gas Meter Stations, Eliminating 661
Nomogram for Second-Order Systems 462
Non-Linear Pot Tester 159
Nozzle Safety-Relief Valves 988
Nuclear Package for Colleges Cost $30,000 10
Nuclear Radiation, Industrial 596
Null Detector 163
Numerical Readout 1032

O

Odd Rule 469
Odor Meter 1622
Office Machine 539
Ohmeter, Low Range 322
Ohmmeter 520, 1556
Ohmmeter, Automatic 1090
Ohmmeter, Low-R 1884
Oil Separator 170
Open-Hearth Combustion, Programming 260
Open Hearth Control, Modern 265
Operations Recorder 882
Optical Coincidence Reading System 686
Optical Comparator 507
Optical Pyrometer 2007
Optical Pyrometer, Micro 983
Orifice Meter Gas Coefficients, Computation of 1537
Orifice Metering 1378
Oscillator 938
Oscillator, Computing Transfer 692
Oscillator, Power 1099
Oscillator, Precision Variable Frequency 519
Oscillator, Pulsed 913
Oscillator, Subcarrier 938
Oscillator, VF 1097
Oscillators, Low-frequency Mechanical 16
Oscillators, Power 159
Oscillators, Subcarrier 705
Oscillators, Test 158, 320
Oscillogram Scanner 2012
Oscillogram Trace Reader and Computer 1076
Oscillograph, Airborne 882
Oscillograph Charts 163
Oscillograph Editor 2013
Oscillograph Galvanometer Signal Overload Protector 886
Oscillograph, Rack Panel 1421
Oscillograph, Six-Channel 1406
Oscillograph, Strip Chart 1856
Oscillograph, 25-Channel 1425
Oscillograph, 2-Channel 522
Oscillographic Measurement, Recent Advances in 842
Oscillographs 160, 882, 1255, 1427, 1578
Oscilloscope, 5" 693
Oscilloscope, General Purpose 160
Oscilloscope, Portable 1870
Oscilloscope, 2-Channel 1574
Oscilloscopes 322, 1243, 1406, 1573
Oven for Aging Tests 1228
Oven, Lab 343
Oven, Lab Drying 936
Oven, Revolving Shelf 139
Ovens, Gravity Convention 539
Overpotential Tester, DC 320
Overseas Instrumentation Developments, I&A Readers to Get Full Coverage of 582
Overspeed Protectors 680
Oxygen Analyzer, Dissolved 1080
Oxygen Indicator 1080
Oxygen Plant Control 287

P

Palmer Epoxits 1150
Panel Indicator, "Frozen-Reading" 669
Panel Instruments 1243, 1424
Panel Tubing Standard Proposed, Color-coded 582
Panhandle Pete 52, 427, 664, 778, 1014, 1169, 1315, 1509, 1793, 1951
Particle Distribution Analyzer 304
Particle Size Analyzer 902
Peak Voltages, Measurement of 594
Penetration Tester 157
People In the News 180, 348, 544, 710, 942, 1103, 1256, 1432, 1580, 1724, 1886, 2017
Peristaltic Pump 1558
pH Kit for Multi-station Use 173
pH Measuring Equipment 1230
pH Meter, Line-Operated 1708
Phase-Lock Demodulator 1401
Phase Meter 539
Phase Relations in Delay Lines 1675
Phase Sequence Switch 934
Phase Shifter 1556
Photocell Amplifier 677
Photocopier Modification 338
Photocopies 1239
Photodiode, Integral-Lens 677
Photoelectric Tachometer 1567
Photoelectric Timer 1557
Photoelectric Controls 146, 306, 704
Photoelectric Heads 146
Photoelectric Scanners, Miniature 174
Photomultiplier Supply 677
Photoreader 1739
Photo recording Paper 537
Photostress Analysis 168
Phototransistor 677
Pickup, Acceleration 1236, 1421
Pickup Carrier Amplifiers 1429
Pickups, Displacement 1236, 1417
Pickups, Pressure 1233, 1394, 1420, 1423, 1857
Pigment for Lab Thermometer, Permanent 343
Pilot Light, Push-to-Test 158
Pilot Lights, Oil Tight 531
Piston Seal 531
Pitot Tube 502
Plate and Film Comparator 1422
Plug-In Circuits, Germanium Transistor 922
Plug-In Components 670
Plug-Ins, 2-in-1 and 3-in-1 527
Plug and Jack 528
Plug and Receptacle 925
Plugs, Push-Pull 704
Pneumatic Control Relays 498
Pneumatic Controller 242
Pneumatic Function Generator 1862
Pneumatic Power Relay 1094
Pneumatic Presses 1557
Polarity Tester 537, 692
Polyphase Meter 324
Portable Pyrometer 1875
Portable Welding Gun 2011
Positioner Servomechanism 1161
Positioning Control, Numerical 772
Post-Office Automation 742
Potential Transformers 342
Potentiometer, Indicating 498
Potentiometer, Portable 160
Potentiometer Pyrometer, Portable 541
Potentiometer, Recording 668
Potentiometers 692
Power Cylinders 1557
Power Rectifiers 1875, 2011
Power Relay 1701
Power Source for Portable Devices 1100
Power Supplies 176, 1099
Power Supplies, Constant-Current 707
Power Supplies, DC 165, 326, 525, 1555, 1575
Power Supplies, HV DC 164, 325
Power Supplies, LV DC 918
Power Supplies, Modulized DC 525
Power Supplies, Regulated 918
Power Supplies, Transistor 524
Power Supplies, Transistorized 167
Power Supplies, Ultra Stable 917
Power Supplies, Wide Range 1245
Power Supply 539, 937, 958, 1717, 1881, 2005
Power Supply, AC 917
Power Supply for Airfields, etc. 178
Power Supply, Auxiliary 1852
Power Supply, 1500-AMP 525
Power Supply, HV 326, 1706
Power Supply, HV DC 525
Power Supply Kit 1097
Power Supply, Medium-Voltage 917
Power Supply, Precision DC 1245
Power Supply, Silicon Rectifier 523
Power Supply, Solid-State 1245
Power Supply, 30 kvdc 526
Power Supply, Transistor 167
Power Supply, Transistorized 1861
Power Supply, 25 kw Silicon 177
Power Supply, Ultra-High Regulation 171
Power Supply, Unregulated 1879
Power Supply, Welding 1877
Power Transistor, High-frequency 537
Preamplifier, DC Coupling 1859
Precision Balances, Automatic Reader for 1972
Precision Tuning Forks 1951
Precision VDRs 1246
Predetermined Counter 1704
Preset Counter & Digital Frequency Divider 1401
Preset Counter, Transistorized 1706
Preset Counters 1711, 1884
Press Brake 938
Pressure Calibrators 1084
Pressure Gage, Extreme 505
Pressure Gage, Non-Metal-Case 897
Pressure Gage, Solid-Front 2005
Pressure Gages 1394
Pressure Logger, Automatic 1084
Pressure Measurement, Manometric 1950
Pressure Pickup, Absolute 1084
Pressure Pickup Calibrator 1233
Pressure Pickup, Hi-Temp 1562
Pressure Pickups, Miniature 510
Pressure Pickups 144, 306, 677, 936, 1233, 1394, 1420, 1423, 1568, 1857
Pressure Recorders 308
Pressure Regulators 1560
Pressure Scanner 1932
Pressure Scanning System 1366
Pressure Signal Monitors 1234
Pressure Snubber 1394
Pressure Standard 1084, 1868
Pressure Switch 1394
Pressure Switch, Absolute 508
Pressure Switch, Dual 1084
Pressure Switches 141
Pressure-Temperature Measuring System 1721
Pressure and Temperature Pneumatic Transmitters 1230
Pressure Test Recorder 306
Pressure Transducer Element 772
Pressure Transducers 1150, 1883
Pressure Transmitter 144, 1770
Printed Card Receptacles 1570
Printed Circuit Connector 1714
Printed Circuit Trimmer 1426
Printed Circuits, Resistor for 1409
Printer for Data Processing, High Speed 30
Printer, High Speed 497
Problems Unique to Computers of a Kind 1219
Process Characteristic Analyzer 862
Process Controller 304
Process Control Tester 1555
Process Simulation 652
Production Data Recorder 499
Production Line Inspection and Correction Automatized 668
Production Time Recorder 885
Program Controller 1252
Program Instrument 1864
Program Timer, Electronic 312
Program Timers 1866
Programming, Applications of Flow Graphs to Analog Computer 1063
Programming Controller 888
Programming Plug Set 671
Programming Systems 302, 1429
Projecting Microscope, Precision 601
Projector Accessories 1088
Prophetic Prediction and Program 255
Proximity Coil For Non-Magnetics 310
Proximity Detector 144
Proximity Pickups 310
Pulse Code Generators 670
Pulse-duration Modulated Multiplexer 674
Pulse Engineering 32
Pulse Generator, Standard 1404
Pulse-Height Analyzer and Scaler in Single Chassis 343
Pulse Magnetic Amplifiers 1487
Pulse Modulator 691
Pulse Spectrometer 701
Pulse Timers 149
Pulse Transformer Kits 327
Pulse Transformers 302, 1428
Pump, Abrasive Liquids 306
Pump, High-Vacuum 898
Pumps for Corrosives 1392
Punch Press Control 892
Punched Card Buffer 1071
Punched Card Sensor 1390, 1401
Punched Tape, Super-Speed 306
Purge Meter 538
Pushbutton Carrier Voltage Attenuators 520
Push Buttons 1864
Pyrometer, Needle-Type 508
Pyrometer, Surface 1234
Pyrometers, Aluminum Case 678

Q

Quartz, Fused 704
Quick-Stop Gearmotor 1572

R

RMS Millivoltmeter 1406
Rack-Panel Oscillograph 1421
Rack-Panel 'Scope 1419
Rack Panels 1427
Rack Supports, Shelves, Etc. 931
Racks and Cabinets 1568
Racks, Mobile 931
Radarscope Camera 933
Radar Test Set 1404
Radiation Alarm 1704
Radiation Analyzer 1402
Radiation Detector and Radio Receiver 701
Radiation Instrumentation, Trends in 624
Radiation Monitor 938
Radiation Pyrometric Controller 1719
Radioactive Source Calibrator 745
Radioactivity Counter 511
Radioactivity Instruments 42
Radio Chromatography, Automatic Scanning System for 902
Radiometer, Industrial 396
Radius Turning Machine 1087
Rate Meter, Automatic 498
Ratemeter, Averaging 1253
Ratemeter and Counter 899
Ratemeter, Seven-Range 1236
Ratemeters, Duplex 700
Rate-of-Turn Table Accessories 1228
Ratio Totalizer 1878
Reactor Control 630
Reactor Control, Power 626
Reactor Physics, Introduction to 616
Readout, Automatic Extended 936
Readout Counter 1070
Readout Units 303
Readout, Wheel and Belt Digital 1526
Recent Advances in Oscillographic Measurement 842
Receptacle for Printed Circuits 536
Record and Playback Head 1563
Recorder, Acceleration 1578
Recorder Accessories 888
Recorder, Application of the X-Y 849
Recorder for Computers 883
Recorder Controller, Humidity and Temperature 1082
Recorder, Duplex 150
Recorder, Electronic 984
Recorder, Flexible Multipoint 1552
Recorder Galvanometer 1560
Recorder, Gamma Intensity 1718
Recorder, Inkless 885
Recorder, Miniature Event 1879
Recorder, Multiple 499
Recorder, Multiple Bank 882
Recorder, Operation 882
Recorder, Oxygen Purity 1230
Recorder, Production Data 499
Recorder, Rapid Multiple 494
Recorder, Segmental 1423
Recorder, Strip Chart 883, 1560, 1880
Recorder Survey, Part II 1360
Recorder Switch 886
Recorder, X-Y 1424
Recorders 848
Recorders, Acceleration 1567
Recorders Being Used with Analog Computers, Survey of 852
Recorders, Circular Chart 1552
Recorders, Evaluation Factors for 841
Recorders, Introduction to 830
Recording Annunciator 1562
Recording Galvanometer, Selecting a 838
Recording via Magnetic Tape, Graphic 853
Recording in Medicine and Biology 851
Recording Oscillographs in Aircraft and Missile Testing 846
Recording and Playback Head 706
Recording Potentiometer, Applications of the 850
Recording, Sweep Balance 854
Rectangular P-M Motor 1417
Rectifier, Controlled 697
Rectifier, "Expandable" 1246
Rectifier Junctions, 200 amp Silicon 176
Rectifier, Selenium 327
Rectifier Stacks, High power Silicon 175
Rectifiers, Axial Lead Silicon 541
Rectifiers, H-C H-V 1414
Rectifiers, High-voltage Selenium 175
Rectifiers, Instrument 596
Rectifiers, Silicon 697, 1092
Rectifiers, Silicon Power 327
Rectilinear Recorder 1712
Refinery Uses Electrohydraulic Control 10
Reflections on Fifty Years of Recording 827

Reflectometer, Automatic Recording 128
Regulated Power Supplies 918
Regulation Pitfalls 1060
Regulator, Air Pressure 1885
Regulator, Flow 1236
Regulator Tubes 697
Regulator, Voltage 1868
Regulators - No. 9 479
Regulators - No. 10 867,
Regulators - No. 11 1839,
Regulators - No. 12 1373
Regulators, Line Voltage 1427
Regulators and Safety Valves No. 10 1531
Relay, Computing 1392
Relay, "Crystal-Can" 1562
Relay, General-Purpose 922
Relay, Heavy-Duty 328
Relay, Hi-Temp 1098
Relay, Latching Power 328
Relay, Mercury-Contact 528
Relay, Microminiature Magnetic Latching 343
Relay, Multi-Contact 1100
Relay, Noise-Operated 535
Relay, Pneumatic Power 1094
Relay, Polarized 923
Relay, Sealed 529
Relay, Sensitive 539
Relay, Shock-Resistant 328, 1247
Relay, Stepping 923
Relay, Subminiature 1866
Relay, Telephone-Type 1092
Relays, Dual Sealed 166
Relays, Electro-Magnetic 234
Relays, Five-Pole Power 698
Relays, Fused Mercury 528
Relays, High Temperature 698
Relays, Microminiature 705
Relays for Printed Circuits, Midget 168
Relays with Removable Dust Covers 698
Relief and Safety Valves - Sizing of Conventional 1531
Remote Control 1080
Remote Control System 896, 1720
Remote Controls, Mechanical 1626
Remote Gas Meter Reading Device 1397
Remote-Reading Liquid Meter 502
Research Computers 1719
Resistance Calibrator 1404
Resistance Deviation Bridge 692
Resistance Sample Holder 691
Resistance Tester, Surface 320
Resistance Thermometer, Readout 708
Resistor, 10-Watt 703
Resistors, Composition 1873
Resistors, Trimming 1096
Resistor, Tubular 541
Resistors, Ceramic Wirewound 165
Resistors, Composition 327
Resistors, Metal Film Pot 540
Response of Combination Valve Actuators 1518, 1670
Response Tracing System 1242
Reversible Motor, Small 1571
Reversing Rougher, Automated 286
Right Angle Drive 530
Role of The Systems Engineering Firm in Prototype and Consultation Work 96
Roll-Temperature Thermocouples 893
Rolling Mill, Computer-Designed 285
Room, Super White 1207
Rotameter, Snap-in 678
Rotary Switch 1556
Rotary Switch, Miniature 1572
Rotary Torque Solenoids, Dc 343
Rubber Hardness Tester 1089
Russian Exhibit Keynotes Fourth International Automation Exposition 1185

S

Safety-Relief Valves—Where they are needed and Why 479
SAMA's Annual Meeting 978
Sample-Case Sample 1570
Sample-Hold Multiplexer 1401
Sampling Switches 936, 1422
Saws, Circular 539
Scale, General-Purpose 337
Scale, Hopper 900
Scale, Projection Type 1085
Scale Drawing Machine 1698
Scale Feeder, Pneumatic 1366
Scaler, Decade 315
Scaler, High-Speed 541
Scaler, Multiple-Use 902
Scaler, 7-Decade 1401
Scanners 1352
Scanning-Count Computer 510
Scheduling Calendar 500
Scintillation Detector 314, 510
Scintillation Detector + Pulse Height Feature 314
Scintillation Spectrometer 1711
Scratch Microscope 1240
Selecting a Recording Galvanometer 838
Senistor 582
Sensitivity Ratings for Strain Gages 456
Sequence Controller 312
Sequence Timers 148
Serial Memory Package 1852
Series Versus Shunt Bridge Calibration 648
Servo Amplifiers 38
Servo Brake 1093
Servo Couplings 1704
Servomanometer 1394
Servomechanisms, Small 329
Servo Motor 1876
Servo Motor Gearhead 1707
Servomotor, Size 18 529
Servomotor Tach, High-Temp 899
Servo Package 924
Set Screws, Black Nylon 345
Shaft Position Encoders 670
Shaft Position Encoders, Digital 494
Shaft Rotation Coder 1570
Shift Flip-Flop 1398
Shift Registers, Miniaturized 704
Shift Registers, Subminiature 703
Shippingport Reactor 638
Shipping Shock Recorder 341, 885
Shipping Temperature Recorder 885
Show Becomes a School 443
Signal Keyer, TV Test 912
Signal and Sweep Generators 345
Signaling Devices 1080
Significant Science for Secondary Schools 1031
Silicon Junction Diode 537
Silicon Zener Diodes 327
Simulation of Jet Engines 299
Simulation 1043
Simulation of Aircraft Gas Turbines 1065
Simulation Bulletin 2 1357
Simulation Council Newsletter 119, 297, 487, 651, 877, 1063, 1219, 1385, 1548, 1691, 1845, 1991
Simulation of a Process Reactor [illegible]
Simulation of a Solvent Recovery Process 644, 653
Sinter Plant, Automated 206
Sintering-Plant Instrumentation 270
Sizing of Conventional - Relief and Safety Valves 1531
Sizing of Safety-Relief Valves for Variable Back Pressure 1839
Skeleton Pressure and Vacuum Switches 1394
Slide Rest 904
Slide Rule, Use of the 1817
Slide Rules 1814
Slip-Ring Assemblies 527
Slip-Ring, Missile-Test H-V 1100
Slow Torch 707
Slurry Feeder 134, 1485
Small-Parts Counter 1086
Smoke Density Indicator 306
Socket 175
Socket Weld Fittings 1306
Soil Tester 516
Soil Tester, Compression 910
Solar Battery Cells 336
Solder Alloy 176
Soldering in the Space Age 1262
Soldering Tip 342
Solenoid-Magnet, DC 527
Solenoid, Power 166
Solenoid, Rapid-Response 2004
Solenoid Valve, 3-Way 1568
Solenoid Valves 533, 1418, 1563, 1854
Solenoid Valves, High-Pressure Packless 1859
Solenoid Valves, 3000-PSIG 1859
Solion 32
Solvent 703
Solvent Recovery Process, Simulation of a 644
Some problems of analog-digital conversion 119
Sorter, Micrometric 1240
Sound-synchronizing Kits 341
Sound Track Developer 1424
Soviet Trends in Computers for Control of Manufacturing Processes 1810, 1960
Space Suit Provides Comfort for Scientist 1758
Spectrograph, Direct Reading Attachment for 888
Spectrometer, Pulse 701
Spectrometer-Radigraph 540
Spectrophotometer, IR 304
Speed Control Relay 141
Speed Controller, Machine 312
Speed Deviation Recorder 141
Speed Device, Variable 1557
Speed Governor 1397
Speed Indicating System 2004
Speed Reducers 599, 1100
Speed Reducers, Variable 680
Speedmax Instrumentation 408
Spiral Cover, Teflon 526
Spring Coiler 513
Springs Template 1569
Spur Gear Kits 177
Square Root Approximation 1042
Square Root Integrator 1853
Stamping Machine, Hot 513
Standard Ampere, Redetermination of the 206
Standard Simulation Circuits 120
Standards for the Practice of Systems Engineering, Proposed 857
State Supervisors of Science and Mathematics, Needed: More 1805
Static Detector 172
Static-Magnetic Annunciators 992
Steam Meter 703
Steel Mill Self Operating Valves 284
Stepping Switches, Rotary 1625
Stereophonic Cabinet 1099
Sterilizer, Lab 173
Stethoscope, Industrial 906
Stirring Paddle 315
Stock Report 16, 209, 392, 588, 748, 1000, 1144, 1298, 1474, 1616, 1762, 1928
Stopcock, Precision-Flow 682
Stove Changing for Blast Furnaces, Automatic 273
Strain-Gage Control 1879
Strain Gage Filament 2004
Strain Gage Indicator, Digital 537
Strain-Gage Instrumentation 450
Strain-Gage Instruments 470, 649
Strain Gage Panels 1575
Strain Gage Plotter 318
Strain-Gage Principles 446
Strain Gage Readout 1877
Strain-Gage Standard, Optical 455
Strain Gage Trimmer 517
Strain Gages High-Temperature 460
Strain Gages, High Temperature Cements for 307
Strain Gages, Sensitivity Ratings for 456
Strain Gages, Weldable 404
Strip Chart Recorder 1880
Strobe Light Source 312
Subminiature VDR 1573
Subminiature Lamps 1714
Subminiature Neon Lamps 2015
Subminiature Toroids 1878
Subway Ventilation, Control of 1200
Super Alloy Tubing 756
Superheat Checking Kit 501
Supervisory System, Pulse-Width-Selection 313
Super White Room 1207
Supplies, Transistorized 1245
Supplies, Wide-Range Power 1245
Supply, How to Build a Transistorized 40-watt 1158
Supply, Precision DC power 1245
Supply, Solid-State Power 1245
Surface Finish Microscope, Microinch 154
Surface Illuminator 1875
Survey Meter, Radiation 315, 510
Sweep Balance Recording 854
Switch, Circuit Board Integral 328
Switch, D/P 564
Switch Development, Commutation 1368
Switch, Drum 1246
Switch With External Adjustment, Rate 342
Switch, Foot 1859
Switch, Foot or Elbow 1571
Switch, Lever-Actuated 1571
Switch, Proximity 1879
Switch, Sampling 1238
Switch, Sensitive Low-Pressure 505
Switch, Snap-Action 1246
Switch, Subminiature 527
Switch, Tiny Push Button 328
Switch, Tiny Sampling [illegible]
Switches 1097
Switches, Draft Gages with 1394
Switches, Dual Pressure 1562
Switches, Heavy-Duty Step 1412
Switches, Hi-Temp 166
Switches, Lighted-Button 1719
Switches, Machine Tool 166
Switches, Pair of Limit 328
Switches, Push Button 1246
Switches, Toggle 540
Switches, Varistor Spark Suppressor in 1862
Systems Engineering vs Applications Engineering 86
Systems Engineering Council 571
Systems Engineering Council News 829
Systems Engineering, Proposed Standards for the Practice of 857
Systems or Hardware? 71
Systems, Water Treatment 1230

T

Tachometer, Electrical 312
Tachometer Generator 1556
Tachometer, Motor 1396
Tachometer, Optical 140
Tachometer Transmitter 140
Tachometer-Vom 1090
Tachometers 603
Tachometric Pickups 1396
Tag-to-Card Converter 1078
Tape Monitor 1567
Tape and Paper Splicer 1078
Tape Printer 1079
Tape Punch Input Unit 537
Tape Punch and Tape Duplicator 670
Tape, Punch, Tape Reader 2010
Tape Reader 1007, 2007
Tape Reader, Perforated 495
Tape Reader, Tape Punch 2010
Tape Recorder 128, 1421
Tape Recorder, Dual-speed 173
Tape Strip Reader 1866
Tape System 1864
Tape Transport 1078
Tape Transport System 1866
Tapes, Electrical Contact 538
Teflon 1623
Teflon Standoff Terminals 1866
Telefacsimile System 933
Telemeter Receiver, Multiple-Record 136
Telemetering Display 901
Telemetering Filters 1942
Telemetering Oscillators 1576
Telemetering, Radio 936
Telemetering and Supervisory Control System 136
Telemetering Transceivers 1567
Telemetering Transmitter 707
Telemetering Transmitter, Transistorized FM 901
Telephone-Type Relay 1092
Telescopes 340, 702
Telescopes, Bore 507
Teletypewriter Monitor 1567
Television in the Steel Industry, Closed-Circuit 282
Temperature Control, Cryostat for Precise 1612
Temperature Control Valves 1099
Temperature Controller, Low-Cost Indicating 893
Temperature Controller, Dual Switch 1397
Temperature Controllers 133, 308, 341, 541, 893, 894, 938, 1082, 1392, 1939
Temperature Controls 345
Temperature Difference, Chart for Logarithmic Mean 1623
Temperature Indicator 1573
Temperature Limit Control System 1234
Temperature Measurement Subsystems 1418
Temperature-Operation Recorder 882
Temperature Scanner 1875
Temperature Test Chamber 1306
Temperature Transducers 1882
Temperature Transmitter, Indicating 308
Temperature and Vibration Testers, Combination 1228
Template, Draftsman's 1255
Template, Math Symbols 932.
Template, Piping 702
Templates 534, 706
Tensile Test Clamps 540
Tension Meter 155
Terminal Boards, Solid-block 1158
Terminal Pinserter 536
Terminals and Connectors 1096
Terminals, Printed Circuit 925
Terminals, Standoff 699
Termination Ferrules 1721
Terms and Definitions for the Weighing Industry 1962
Test Chamber 538
Test Chambers, Environment 908
Test Gages, 142, 1425
Test Monitors 158
Test Oscillator 911
Test Panel and Supply 519
Test Resistance Networks 1872
Test Stands, Pneumatic 157
Tester, Ball Bearing 1241
Tester, Corrosion 1254
Tester, Hydraulic-Fluid 1241
Tester, Process Control 1555
Tester, Smoothness, Porosity-Softness 1866
Tester, Viscosity 1241
Testers, Building-Block 691
Testers, Combination Temperature and Vibration 1228
Testing Machine 156, 1089
Testing Unit 1879
Theodolite, Precision 341
Thermal Compensator for Bourdon Gages 473
Thermatron, Gas 772
Thermistor Kit 1420
Thermistors, Matched 919
Thermocouple Assemblies 1234
Thermocouple Extension Cable, Multipair 132
Thermocouple Gland 2007
Thermocouple, High-Pressure 2008
Thermocouple, High-Velocity-Steam 133
Thermocouple, Metal-sheated Ceramic insulated 764
Thermocouple Reference Junction 934
Thermocouple, Stove-Dome 935
Thermocouple Well 935
Thermocouples and Conductors 1876
Thermocouples, H-P H T 501
Thermocouples, Roll-Temperature 893
Thermocouples Leadwire Adapter 1406
Thermocouples, Universal 501
Thermocouples, Wire 988
Thermometer, Dial 502
Thermometer, Recording 133
Thermometer, Resistance 132, 309
Thermometer, Submarine Type Industrial 1082
Thermometer, Testing 1234
Thermometers, Industrial 1082
Thermometers, Permanently Marking 540
Thermometers, Thermistor-Actuated 1858
Thermometric Bridge 678
Thermometric Pickups, Surface Temperature 502
Thermometric Resistor 1234
Thermoregulator 1234
Thermostat 1392
Thermostat, Heavy Duty 893, 1255
Thermostat for Hot Rollers, A Novel 1011
Thermostat Metal Elements 242
Thermostat, Miniature 1082
Thermostat Tester, Room 319
Thermostat, Three-Phase 501
Thermostats, Corrosion-Resistant 704
Thermostats, Disc-Type 30
Thickness Gages, Beta-ray 340
Thirtieth Anniversary Comments 74
Thyratrom Grid Drive, Push-Pull All-magnetic 538
Thyratron Grid Drive 936
Time Code Generator 337
Time-Data Printer 1238
Time Delay Relay, Transistorized 403
Time Delay Relays 148, 175, 936, 1252, 1573
Time Delay Relays, Thermal 680
Time and Frequency Counter 1074
Time Indicators, Elapsed 150
Time Interval Measurement to 10^{-8} Second 1684
Time Lapse Drive Unit 1095
Timer, Automatic 898
Timer, Automatic Pulse 1252
Timer, Dryer 680
Timer, Photoelectric 1557
Timer, Repeat-Cycle 508, 899
Timer, Repeat Cycle Dial 898
Timer, Reset 898
Timer, 16-Intervals 1864
Timers, Automatic 898
Timers, Electronic 148
Timers, Interval 149
Timing Alarm Device 1239
Timing and Recording Systems 886
Tin Thickness Gage, X Ray 276
Tiny Indicator 1406
Tipp-Tronic Controls 1152
Toroidal Transformers 1573
Torque-Free Bearing 1866
Torque Motor 1251
Torsional Damping Tester 1576
Total Temperature Probe 132
Transac S-2000 764
Transductors 767
Transfer-Function Meter 1483
Transformer Tester 319
Transformers 707
Transformers, C-V 1410
Transformers, Miniature 1099
Transient Response Analyzer 1676
Transistor Diode 582
Transistor and Diode Radiators 921
Transistor Heat Sink 921
Transistor, HF Germanium 1410
Transistor Logic Elements 1238
Transistor Mounting Clips 345
Transistor Power Supply 1099
Transistor Test Set 1429
Transistor Tester 911
Transistor Transformers 1092
Transistorized Chopper 1480
Transistorized Circuit Modules 1162
Transistorized 40-watt Supply, How to Build a 1158
Transistorized Relay 1868
Transistorized Supplies 1245, 1409
Transistorized Timers 1424
Transistors 1246
Transistors, Alloyed Junction 603
Transistors, Glass-Cased 1571
Transistors, HF Power 696
Transistors, High Power Silicon 541
Transistors, Junction 344
Transistors, Silicon 696
Transistors, Ultrastable 936
Translator, Computer Language 494
Transmission Meter 512
Transmission Unit 1879
Transmitter, Absolute-Pressure 1699
Transmitter, Flow Rate 1428
Transmitter and Receiver 527
Transmitter, Set-Point 1080
Transmitters, Force-Balance 1553
Transmitters, Pressure and Temperature Punematic 1230
Transparent Hood 1253
Transparent Phosphor Improves C-R Tube Resolution by 20:1 206
Transportable Environmental Chambers 1228
Trends 21, 423, 577, 739, 975, 1135, 1285, 1465, 1609, 1755, 1917
Trigonometric VDR's 1410
Tube Benders, Combination 1240
Tube Fitting 1248
Tube Fitting, Brazing 1883
Tube Fitting, Bulkhead 168
Tube Fittings 2006
Tubing Bending Clip 532
Tubing Connectors, Teflon Reuseable 540
Tubing Tool Kit 152
Turntable, Servo 1229
TV Camera, Budget-Price 1098
TV Camera Chain, Viewfinder 538
TV Camera, Miniature 337
Twistor 10
Typewriter-Computer 497
Typewriter Tester, Automatic 1098

U

Ultra-High Regulation Power Supply 1719
Ultra-Magnifier 139
Ultrasonic Cleaners 316, 1576
Ultrasonic Cleaning 536

Ultrasonic Gages 689, 1088
Ultrasonic Gaging Transducer [illegible]
Ultrasonic Generators 152
Ultrasonic Tools 1404
Universal Chassis 1570
Universal Ratiometer 1424
Uranium Fluorimeter 1568
Use of Flight Tables in Simulation [illegible]

V

VDR, Precision 1246
VHF Multicoupler 1568
V-Notch Positioner 2009
VTVM, AC 1243
VT VOM 1573
Vacuum Arc Furnace 1255
Vacuum Breakers 701
Vacuum Cleaner 342
Vacuum Controller 1564
Vacuum Gage 174
Vacuum Gage Tube 142
Vacuum Gage, Two Station 935
Vacuum Induction Melting, Instrumentation in 267
Vacuum Pumping Station 306
Vacuum Regulators, Pump Governors, Breakers and Relief Valves 867
Vacuum Switches, Skeleton Pressure and 1394
Vacuum System 1711
Vacuum Thermo Balance 1401
Vacuum-tube Voltmeter, Printed Circuit 693
Valve Actuator 1713
Valve Actuators, Response of Combination 1518, 1670
Valve and Aspirator, Self-Regulating Relief 930
Valve, Bellows Sealed 1100
Valve, Compact High Flow 341
Valve, Diaphragm 242, 930
Valve, Digital-Increment 929
Valve for Environmental Chambers, Shut-off 1228
Valve, Flow Control 1249, 1564
Valve, Gate 1093
Valve, High-Vacuum 929
Valve, Metering 1250
Valve, Packless 169
Valve, Plastic Gate 30
Valve, Plug-In Solenoid 929
Valve Position Holder 1774
Valve, Sampling 930
Valve, Solenoid-operated Drain 173
Valve, Temperature-pressure Relief 173
Valve, 3-Way Solenoid 1410
Valve, Turbine Safety 174
Valve, Two-Position 1250
Valve, Two-Way Solenoid 1094
Valve, Vaporizing 169
Valves, All-Plastic Gate 335
Valves, Ball 533
Valves, Butterfly 332
Valves, By-Pass 332
Valves, Chick 938
Valves, Corrosion-Free 928
Valves, Fittings and Tubing, Quick Assembly H-P 700
Valves, 4-way 1251
Valves for Gas and Oil Transmission Lines, Automatic Shut-off 1373
Valves, High-Flow Solenoid 335
Valves, High Pressure 1410
Valves, High-Vacuum 333
Valves, Large Ball 1250
Valves, Metering 333
Valves, Nylon-Body Check 334
Valves for O.E.M. 703
Valves Pilot Operated, Safety Relief 601
Valves, Pinch Type 169
Valves, Purge Sequence 333
Valves, Reducing 334
Valves, Regulator 332
Valves, Relief 1249
Valves, Safety 706
Valves, Safety Gas 333
Valves, 60,000-Lb Air-Op 1093
Valves, 60,000-PSI Proportioning 236
Valves, Sizing of Conventional Relief and Safety 1531
Valves, Slow-Closing 1093
Valves, Small Size Ball 334
Valves, Solenoid 335, 533, 700, 1249, 1418, 1563, 1573, 1854
Valves, Split-Body Springless 1775
Valves, Stock 333
Valves for Variable Back Pressure, Sizing of Safety-Relief 1839
Valves, Vibrationless 928
Valves, Water-Heater 1096
Valvmatic Actuator 1624
Vapor Condenser 339
Vapor Flow Meter, Gas and 1558
Vapor Pressure Recorders 130, 404
Variable-reluctance Pressure Pickups 677
Variable Scale 1820
Variable Toroids 1410
Variable Transformers 695
Variable Transformers, Dust-Tight 1100
Variable-Voltage Tester 1575
Varistor, Field-effect 582
Velocity Instrumentation, B-58 Vertical 1840
Vibration-Fatigue Tester 910
Vibration Meter 2008
Vibration Pickups 310, 894, 935
Vibration Testing, Power Amplifiers for 318
Video Termination 341
Viscometer 1880
Viscometer, Pipe Line 128
Viscosity As A Process Variable 1212
Viscosity Tester 1241
Visual Training Aid 1560
Vital Function Monitor 701
Voltage and Current Calibrator 517
Voltage/Current/Temperature Transmitters 756
Voltage-Digital Converter 914
Voltage-to-Digital Converter, High Speed 497
Voltage-Dividing Resistor 525
Voltage dividing resistor with Dial 707
Voltage-Dividing Resistors, High Resolution 1092
Voltage-Dividing Resistors, Microminiature 165
Voltage Limiter 1861
Voltage Monitor 137
Voltage Regulator, AC 344, 541
Voltage Regulator & Reference Zener Diodes, Silicon 920
Voltage Regulators 325, 1716
Voltage Sources, Precision 1091
Voltage Standard and Null Meter, DC 321
Volt-Am-Ohmmeter 174
Voltmeter, Crest 913
Voltmeter, Digital 523, 1073
Voltmeter, Electronic 1244
Voltmeter, Six-Digit 1424
Voltmeter and VTVM, AC 160
Voltmeter, Vacuum-Tube 322
Voltmeters, Expanded Scale 706, 1096
Voltmeters, RMS 159
Volt-Ohm-Ammeter 523
Volt-Ohmeter, Digital 1074
Volt-Ohmmeter, AC/DC 1875
Volt-Ohmmeters, Digital 323, 936
Volt-Ohmmeters, Rack Mounted Digital 693
Volt-Ohm-Milliammeter 322
Volts to Digits Converter 1721

W

Wanted: Inventions 1524
Water Bath 176
Water Detector 128
Water Level, Micrometer 317
Water Vapor Indicator 404
Waveform Generator, TV 938
Waveform Translator 694
Web Guide Control 1230
Weigher, Belt Stream 1085
Weigher-Feeder, Liquid 502
Weighing Fast Freight 1975
Weighing Industry, Terms and Definitions for the 1962
Weighing While Conveying Electrohydraulic Actuator 1978
Weight 1964
Weight Measurements, Multi-Bucket [illegible]
Weld Analyzer, Mobile 516
Welder, Printed Circuit 685
Welding Control 685
What Price Computer Reliability? 1039
What and Where Is the Systems Engineering Market? 80
Wheel and Belt Digital Readouts 1526
Whiteprinter, Dry Process 1095
Whiteprinters 171, 1708
Who Specifies Control Systems? 88
Who Uses Medium-Size Computers? 1827
Why Fight Valve ΔP in Pump Discharge Design It! 483
Why Use a Magnetic Strain Gage? 1150
Wind Speed and Direction Indicator 1569
Winder, Automatic 152
Wire Marker Package 964
Wire Markers 686
Wire Marking, Automatic 152
Wire Sample Board 1086
Wire Testers, High-Speed 520
Wiring Devices 925
Wiring System Testing 28
Wrap-Around Tape 1570

X

X-Y Plotter and Recorder 1150
X-Y Recorder 1424
X-Y Recorder, Application of the 849
X-Y Recorders 848, 885
XY & Time-Base Recorder 885

Z

Zoomer Lens, ITV 1100

AUTHOR AND SOURCE INDEX

A

A'G A' Div., 148
AMP Inc. 167, 1096, 1229, 1429
A P Controls 533
ATC, Inc. 1879
Abramis, Dov 1221
Ace Electronics Associates, Inc. 165
Ackerman Engravers 928
Ackerman, Sumner 1368
Acoustica Associates, Inc. 152, 316, 934
Acro Div. 167
Acromag, Inc. 1855
Acromark Co. 152, 513, 934, 1086
Acton Laboratories, Inc. 1710
Adage, Inc. 914, 1552
Advanced Industries, Inc. 1855
Advanced Research Associates, Inc. 329
Aero Electronics Co. 302
Aero Research Instruments 501, 934
Aerojet-General Corp. 147, 173, 340
Aeronautical Structures Laboratory, Naval Air Material Center 455
Aerovox Corp. 1855
Affiliated Manufacturers, Inc. 1240
Aidlings, Inc. 536
Ainsworth & Sons, Wm. 315, 682
Aircraft Controls Div. 173
Airmatic Valves, Inc. 1418
Air-Maze Corp. 1622
Airserco Mfg. Co., Inc. 1879
Air-Shields, Inc. 1253, 1853
Alden Products Co. 1577
Alectra Div. 320, 537, 1852
Alfa American Corp. 513
Alfred Electronics 1881
Alina Corp. 1240
All American Tool & Mfg. Co. 157, 910
Allegany Instrument Co., Inc. 28, 127, 323, 340, 523, 767, 1233, 1416, 1567
Allen-Bradley Co. 1246
Allied Radio Corp. 173, 1096
Allison Co., W. D. 1553
Allison Labs. 328
Alteneder & Sons, Theo. 1625
Amber, George H. 568, 571, 829, 857
American Brake Shoe Co. 1251
American Chain & Cable Co., Inc. 907, 2005
American Designed Components, Inc. 1100
American Electronics, Inc. 905
American Instrument Co., Inc. 236, 310, 404, 501, 505, 536, 700, 1401, 2005
American LIP Corp. 1557
American Machine & Metals 340, 981, 1394
American Measurement & Control, Inc. 1251, 1556
American Meter Co. 1557
American-Monarch Corp. 1721
American Photocopy Equipment Co. 1239
American Recording Chart Co. 886
American Rectifier Corp. 703
American Research Corp. 156, 1698
American Standard Products, Inc. 1702
American Standards Association 836
American Time Products, Inc. 1934
American Tradair Corp. 340, 510
Ames Co., B. C. 934
Ampex Corp. 303, 1416
Amphenol Electronics Corp. 167, 330, 925, 934
Amplifier Corp. of America 1575
Analoque Controls, Inc. 1410
Analytical Measurements, Inc. 173
Anderson, Greenwood & Co. 601
Andromeda, Inc. 673
ANelex Corp. 497
Annis Co., R. B. 934
Apex Scientific Co. 498
Applied Science Corp. of Princeton 136, 158, 163, 313, 500, 1238
Arenberg Ultrasonic Lab., Inc., 913, 1096
Arenberg, David L. 1676, 1679
Aristo Grid Lamp Products, Inc. 702
Arnoux Corp. 1082, 1234, 1418, 1882
Aronson, Milton H. 474, 830, 860, 1050, 1371, 1529, 1668, 1814, 1831, 1964, 1987
Askania Regulator Co. 28
Assembly Products, Inc. 340, 403, 669, 888, 894, 913, 1568, 1882
Associated Research 703, 934
Atlas E-E Corp. 331
Atlas Valve Co. 333, 334
Audio Devices, Inc. 1092, 1246
Automatic Development Co. 696
Automatic Electric Co. 1092, 1625, 1862
Automatic Mfg. Div. 175
Automatic Switch Co. 172, 173, 1228, 1412, 1557, 1568, 1859
Automatic Timing & Controls, Inc. 145, 310, 505, 892, 894, 898, 1686
Automation Controls Corp. 1092
Automation, Inc. 668
Automation Products, Inc. 304
Automation Shares Management Corp. 1380
Autotran, Inc. 146
Autotron, Inc. 306, 1557
Autotronics, Inc. 529, 698, 935, 1093
Autron Engineering, Inc. 144, 933, 1670
Avionic Div. 527, 899, 1244, 1571, 1876
Axelrod, Leslie R. 462, 1042
Axler Associates, Inc. 677

B

B & F Instruments, Inc. 756, 1879
BJ Electronics 1236, 1402, 1868
Babcock Relays, Inc. 1562
Bacharach Industrial Instrument Co. 135, 505, 882
Bacon Industries, Inc. 703
Bailey Meter Co. 1230, 1392, 1556, 1856
Bailey, E. G. 74
Baird-Atomic, Inc. 245, 510, 710, 888, 902, 1401, 1429, 1711
Bald Eagle Corp. 1864
Baldwin-Lima-Hamilton Corp. 156, 318, 517, 1089
Ball Bros. Research Corp. 1568
Ballantine Labs. 1244
Barber-Colman Co. 173, 309, 502, 669, 893, 935, 1096, 1250, 1417, 1552
Barden Corp. 1241, 1860
Barksdale Valves 141, 703, 1131, 1394, 1859
Barnes Development Co. 1076
Barnes Engineering Co. 396
Barnstead Still & Sterilizer Co. 173
Bausch & Lomb Optical Co. 536, 1427
Beard, Chester S. 867, 1053, 1373
Beck, Robert M. 1389, 1836
Beckman/Helipot Corp. 530
Beckman Instruments, Inc. 139, 304, 306, 336, 523, 536, 692, 886
Beckman Process Instruments Div. 498, 700, 1080, 1480
Beckman/Systems Div. 1076
Beckman, Paul 460
Beecher, Duane 1548
Behar, Major Manoel F. De Mayo 1351
Behlman Engineering Co. 917
Bekey Electric Co., Inc. 1713
Bekey, George 1548
Belfab Corp. 700
Bell Telephone Laboratories 10
Belleville-Hexem Corp. 523
Bellofram Corp. 531
Bendix Aviation Corp. 234, 1932, 2007
Bendix Computer Div. 234, 302, 1932, 2007
Benrus Watch Co., Inc. 1873
Benson-Lehner Corp. 126, 163
Bentley, Dr. George P. 1368
Berkeley Div. 523, 536, 692
Berkeley Dynamics 1854
Berman, George 1977
Beta Electric Div. 164, 320, 325, 326
Biddle Co., James G. 520, 690, 1713
Biggs Co., Inc., Carl H. 536
Bin-Dicator Co. 1557
Bird, John 1991, 1996
Birtcher Corp. 921
Blackwell, Elizabeth 1694
Blanc, L. A. 1992
Blehart Co., L. D. 500
Blue M Electric Co. 517, 1253
Bodine Electric Co. 1096
Boice Gages, Inc. 905
Bon-De Electronic Labs., Inc. 1714
George Borg Corp. 1417
Borg Equipment Div. 1417, 1428
Borg-Warner Corp. 1236, 1402, 1868
Boston Div. 1082
Bourns Labs. 935, 1084, 1096, 1236, 1417, 1567, 1573
Bowes, Henry 1544
Bowman, H. A. 1973
Bowser, Inc. 1698
Bradley, Robert O. 1978
Brady Co., W. H. 152, 904
Brailsford & Co., Inc. 148, 703, 1418
Branson Instruments, Inc. 155, 1088
Branson Ultrasonic Corp. 152, 536
Branton, Raymond 1909
Brew, Roderick A. 1684
Brewer, George 1548, 1549
Brey, Jr., R. N. 630
Bridgeport Thermostat Div. 1410, 1864
Bright, James 372
Bristol Co. 136, 163, 308, 396, 498, 694, 882, 885, 886, 888, 935, 1096, 2008, 2015
British Industries Corp. 1398
Brocker Laboratories 1090
Brockett, Glenn F. 111
Brodie, A. C. 80
Brombacher, W. G. 730
Brooks Rotameter Co. 396, 1428, 1775
Brown Instruments Div. 128, 130, 329
Brown, Richard P. 74
Browning, E. H. 286
Bruning Co., Inc., Charles 171
Bud Radio, Inc. 1568
Builders-Providence, Inc. 703, 1083, 1312
Burke & James, Inc. 173, 338, 536
Burnell & Co., Inc. 1410, 1942
Burnell, Lewis G. 1675
Burnet Co. 1086
Burns, Meryl 119
Burrell Corp. 1080
Burroughs Corp. 1769
Burroughs Electronic Tube Div. 682
Burt, Jr., William G. 1983
Bush Associates, G. F. 304, 682
Bussman Mfg. Div. 703
Bylo, John 96
Bytrex Corp. 1573

C

CBS-Hytron 1158
C K Components 703
G-Mar Corp. 28, 134, 502
California Computer Products 304
California Eastern Aviation, Inc. 2005
California Technical Industries Div. 670, 910
Cambridge Thermionic Corp. 529, 925, 1866
Cannon Electric Co. 234, 536, 537, 1706
Cardinal Instrumentation Corp. 140, 159
Carter Motor Co. 330, 537, 1556
Cartier, R. J. 1980
Cash-Acme 173, 701, 1096
Cash Valve Mfg. Co., A. W. 1249
Castile, George E. 1388
Century Electronics & Inst. 882
Cerni, R. H. 842
Chappell, Bartlett E. S. 6
Chase-Shawmut Co. 915
Cherry Electrical Products Corp. 1246
Chestnut, Harold 1748
Cinema-Aerovox 173
Cincinnati Sub-Zero Products 1701
Circon Component Corp. 146, 2015
Clare & So., C. P. 529
Clary Dynamics 302, 1251, 1885
Clevite Transistor Products 537, 696
Clifton Precision Products, Inc. 1707
Clymer, Ben 654
Clymer, J. B. 1691
Code Electric Co. 1247
Coe, Dr. James C. 1046
Cohu Electronics Inc. 917, 1068, 1073, 1406,
Coleman Engrg. Co., Inc. 496, 537, 671, 1862
Collins Radio Co. 1878
Colton, G. A. 284
Comar Electric Co. 1866
Combination Control Div. 306
Commercial Div. 1712, 1853
Components Div. 1246, 1620
Computer Components Div. 302, 494, 697, 1233
Computer Control Co., Inc. 234, 1073, 1398, 1852
Computer Engrg. Assoc., Inc. 935, 1564
Computer Instruments Corp. 159, 1096, 1568
Computer Measurements Corp. 508, 890, 1097, 1427
Conant Labs. 596
Conax Corp. 893, 1715, 2007
Concord Controls, Inc. 1070
Conison, Joseph 483
Conoflow Corp. 1410
Consolidated Avionics Corp. 494
Consolidated Electrodynamics 142, 158, 164, 174, 304, 320, 324, 520, 537, 674, 935, 1070, 1076, 1084, 1233, 1254, 1255, 1398, 1556, 1852
Control Data Corp. 499
Control Device Div. 894
Control Div. 767, 1563, 1854
Control Products, Inc. 1571
Control Valve Div. 703
Cooper, William L. 6, 735
Cooper, Willis M. 652
Corney, Mrs. Frances M. 1201
Cortes, Ronny H. 965
Cosa Corp. 1240
Cox Instruments Div. 673, 896, 1861
Cox & Stevens Electronic Sales Div. 537
Craig, A. J. 1389
Cramer Controls Corp. 166, 936, 1866
Crawford Fitting Co. 168, 532, 1248
Crockett, D. W. 1910
Crosby Valve & Gage Co. 174
Cubic Corp. 1068
Curtiss-Wright Corp. 680, 689
Cutler-Hammer, Inc. 1556

D

Daco Instrument Co. 909
Dage TV Div. 1097
Dahl Co., Inc., G. W. 1234
Dale Products 703
Data-Control Systems Inc. 936, 1091
Data Processing Div. 2010
Datascan, Inc. 328
Datex Corp. 1073, 1879
Datran Electronics 144, 537
Daven Co. 341
Davies Labs. Div. 1076, 1078, 1238

Davis Emergency Equipment Co., Inc. 670, 1772
Davis Instruments Div. 1419, 1706, 1772
Dawson Corp. 1086
Daystrom Inc. 1426, 1552, 1875
Daystrom-Weston Industrial Div. 1552
Dean Thermo-Panel Coil Div. 1623
Decker Corp. 1861
Defiance Machine & Tool Co. 1553
de Florez Co. 932
Dehydrators, Inc. 1567
Dekoron Products Div. 1712
Del Electronics Corp. 163, 326
Delmar Scientific Labs 174
Delsen Corp. 517
Delta Engineering Sales Co. 319
Deltron, Inc. 1573
Demolab Corp. 160
Denison Engineering Div. 1251
Detroit Controls Corp. 1150, 1882, 1930
Deutsch Co. 704
Development Engineering Co., Inc. 1228
Dialight Corp. 534, 1414
Diamantides, Nick 1693
Dice Co., J. W. 320, 537, 692, 1884
Dick Co., A. B. 533
Dietz Co., Henry G. 174, 1394
Digitac, Inc. 680
Digital Equipment Corp. 691, 1310, 1854
Digital Instrument Labs. 519, 1097
Digitran Co. 936, 1074, 1251, 1312
Digitronics Corp. 495, 532, 1707
Dillon & Co., Inc., W. G. 502, 704
Disc Instrument Co. 524
Dit-Mco, Inc. 28
Dixon, W. J. 1222
Dobbie, Norman C. 1127
Dorsett Labs., Inc. 1576
Dressen-Barnes Corp. 524
Driskell, L. R. 88
Dryomatic Corp. 533
Du Mont Labs., Inc., Allen B. 322, 516, 912, 1239, 1408, 1573
Durant Mfg. Co. 174
Dwyer Mfg. Co., F. W. 896, 1419
Dykeman, George 282
Dynac, Inc. 1577
Dynacor, Inc. 1240
Dynamic Controls Co. 326
Dynamic Development Co. 678
Dynamic Gear Co., Inc. 2015
Dynamic Measurements Corp. 341, 885, 886, 1076
Dynamics Instrumentation Co. 695, 916
Dynamics Instruments Corp. 537
Dynamics Research Corp. 1570
Dynapar Corp. 680, 1709
Dyna-vac Co. 1574

E

E-H Research Labs. 2003
EICO 1097, 1560
E. I. L. Instruments 1230
ERA Engineering, Inc. 137
ESC Corp. 327, 920, 1428
EV Instruments 163
Eagle Signal Corp. 150, 898, 1412
Eastern Air Devices, Inc. 174, 1709
Eastern Precision Resistor Corp. 670
Eastman Kodak Co. 338, 341, 537, 1088
Ebert Electronics Corp. 936, 1573
Eckel Valve Co. 341
Eclipse Fuel Engineering Co. 1085, 1620
Edcliff Instruments 1852
Eder Instrument Co. 507
Edin Co., Inc. 324, 516, 693, 886, 1421, 1560
Edmund Scientific Co. 340, 538, 689, 904, 1240, 1402, 1573
Edroy Products Co. 704
Ehlers, Harold 120
Eirich, Chris 1207
Eisenhart, L. W. 260
Elastic Stop Nut Corp. 148
Elayer, Harvey 1378
Elbert Electronics Corp. 528
Elcor Inc. 918
Eldema Corp. 146
Electra Div. 520
Electra Mfg. Co. 341, 1707
Electric Hotpack Co., Inc. 1228
Electric Products Div. 327
Electro-Autosizing Machine Div. 317
Electrodata Div. 1769
Electro Instruments, Inc. 1068, 1856
Electro-Mechanical Development Co. 1625
Electro Mechanical Inst. Co. 1625
Electro-Physics Labs. 704, 1246
Electro Precision Corp. 668, 1091, 1930
Electro Products Labs., Inc. 141, 312, 1697
Electro-Pulse Inc. 140, 517, 670
Electro Snap Switch & Mfg. Co. 167
Electro Switch Corp. 1556
Electro-Voice Inc. 338
Electrol Inc. 1577
Electronic Applications 1556
Electronic Associates, Inc. 126, 704, 936
Electronic Brain Enterprises, Inc. 1719
Electronic Components Div. 327, 1428
Electronic Control Systems, Inc. 130
Electronic Controls Div. 1074
Electronic Engineering Co. of Calif. 337, 494, 1086, 1864
Electronic Equipments Div. 992
Electronic Instrument Co., Inc. 341
Electronic Measurements Co., Inc. 1861
Electronic Processes Corp. of Calif. 312
Electronic Sales Div. (Victor Adding Machines) 990
Electronic Tube Corp. 324, 1419, 1574
Electronics Components Div. 1238
Electronics Corp. of America 146, 306
Electronics Div. 28, 345, 680, 1100, 1573, 1879
Electronics & Instrumentation Div. 517
Elgin Metalformers Corp. 316, 341
Elliott, M. D., Frederic E. 733
Ellis & Sons, Inc., George D. 538
Ellison Draft Gage Co. 1394
Emery Co., A. H. 1097, 1878, 1930
Engdahl Enterprises 1421, 1567
Engelhard Industries, Inc. 704
Engineered Electronics 922
Engineering Enterprises, Inc. 538
Engis Equipment Co. 154, 317, 936, 1240
Englehard, Inc., Charles 151
Engler Instrument Co. 174
Environmental Co. 1228
Environmental Equipment Co. 538
Epic, Inc. 174, 308, 321, 511, 677
Epoxy Products, Inc. 316
Epsco Components 302, 327, 494, 496, 497, 704, 936, 1097, 1238, 1420
Epsco, Inc. 302, 1097, 1091, 1162, 1401, 1620, 1879
Erie Instrumentation 1711
Erie Pacific Div. 1711
Ernst, Arthur 1543
Erwood, Inc. 906
Esco Mfg. Co. 931
Ess Instrument Co. 146, 704, 1152, 1864
Essex Wire Corp. 1098
Exact Weight Scale Co. 2003
Exactel Instrument Co. 1394
Explosive Products Div. 1715

F

Fairchild Camera and Instrument Corp. 1930
Fairchild Controls Corp. 137, 1098, 1246, 1420
Fairfax, Inc. 540
Fairfield Engineering Corp. 936
Falls Industries, Inc. 1312
Far-A-Field Co. 336
Farmer Electric Products Co., Inc. 148, 174
Farris Engineering Corp. 909, 988
Farris Pickering Governor Co., Inc. 936, 1256
Federal Products Corp. 155, 907
Fenwal Electronics, Inc. 341, 704, 916, 1082, 1392, 1420, 1573
Ferguson, Hille & Associates 929
Ferro Machine & Tool Co. 1712
Field, William B. 653
Finney, Horace R. 1038
Fischer & Porter Co. 128, 130, 142, 256, 309, 538, 678, 1068, 1236, 1429
Fish-Schurman Corp. 534, 932
Fishel, Clark 729
Fisher Controls Inc. 1564
Fisher Governor Co. 1401, 1769, 1852
Fitzpatrick Electric Supply Co. 705
Flannell, C. F. 176
Flow-Actuated Control Co., Inc. 1564
Flow Corporation 159, 523
Flow Meter Div. 1558
Fluid Power Accessories, Inc. 1564
Fogiel, Max 1525
Fonda, A. G. 1456
Fourdee, Inc. 2013
Foxboro Co. 308, 678, 1552, 1699, 1998
Francy, Robert 217, 287
Frank, E. 648
Franklin Electronics, Inc. 126, 158, 1073, 1422
Freed Transformer Co., Inc. 165, 322, 1884
Fulton Sylphon Div. 177, 335

G

G-M Labs., Inc. 1715
GPS Instrument Co. 601
G-V Controls, Inc. 148, 1425
Gaertner Scientific Corp. 1241, 1398, 1422
Gaillard, Frank E. 856
Gallagher, G. G. 75
Gardner Lab., Inc. 128, 341, 342
Gas Products Div. 1397
Gast Mfg. Corp. 1251
Gates Electronic Co. 1717
General American Valve Co. 1250
General Aniline and Film Corp. 1571
General Cement Mfg. Co. 705
General Communication Co. 129
General Controls Co. 1571, 1866
General Devices, Inc. 936, 1422
General Electric Co. 130, 136, 141, 175, 206, 316, 324, 327, 342, 697, 705, 772, 936, 1098, 1150, 1240, 1306, 1424, 1563, 1571, 1880
General Instrument Corp. 175
General Plate Div. 242, 538
General Precision Lab. 538
General Products Corp. 1158
General Radio Corp. 695, 1483, 1718
General Research Laboratory 410
General Resistance, Inc. 165
General Time Corp. 680
General Transistor Corp. 245, 603, 677
Genisco, Inc. 1228, 1421
Gen-Pro Div. 1158
Gentry Jr., M. D., Robert 734
Gerber Scientific Instrument Co. 2012
Gerber, Joseph 1820
Germanium & Silicon Div. 327, 344
Gertsch Products, Inc. 1701
Giannini & Co., G. M. 132, 137, 494, 670, 677, 894, 1073, 1088, 1092, 1233, 1423, 1562, 1717
Gillings, D. W. 256
Gilmore Industries, Inc. 318, 495, 1084, 1423
Gits Bros. Mfg. Co. 906
Gizeski, T. 1045
Glengarry Processes, Inc. 502
Globe Industries, Inc. 531, 1092, 1098, 1397, 1715
Goldberg, E. A. 1219
Golub, Roy 733
Gonion, Gordon V. 1748
Gordon Co., Claud S. 132
Gorn Electric Co., Inc. 330
Gorrell & Gorrell 882
Gould Co., J. D. 1249, 1573
Government and Industrial Div. 764, 1076
Gow-Mac Instrument Co. 304, 504
Grand Rapids Div. 1161
Grant Gear Works, Inc. 599
Grayhill, Inc. 175, 328
Greiner Co., Emil 1234
Grieve-Hendry Co., Inc. 936
Guardian Electric Mfg. Co. 166, 1252
Gudeman Co. 1862
Guidero, A. L. 1988
Gulton Industries, Inc. 995, 936, 1404
Gurley, W. & L. E. 594, 686, 1866
Gyra Electronics Corp. 1090

H

H & H Machine Co., Inc. 1087
H. K. & K. Labs., Inc. 538
Hacker & Co., Inc., William J. 1576
Hagan Chemical & Controls, Inc. [illegible], 984, 1708, 1771, 1875, 1878
Halijak, Charles A. 653
Hallikainen Instruments 130, 404
Halogan Insulator & Seal Corp. 1623
Hamilton Watch Co. 1879
Hamilton, W. D. 466
Hammarlund Mfg. Co., Inc. 313, 768
Hammond, Joseph L. 1063
Hamner Electronics Co., Inc. 1558
Hand, Walter E. 278
Haner, Lambert 1691
Hanson-Gorrill-Brian, Inc. 1084, 1098, 1932
Hardy Associates, Norman 1100
Hare Co., D. G. C. 1866
Harnett, Robert 1991, 1995
Harrington, H. J. 297
Hartsall Div. 328
Harvard Apparatus Co., Inc. 923
Harvey-Wells Electronics, Inc. (Res. and Dev. Div.) 986
Hassler Co., Robert K. 139
Hastings-Raydist, Inc. 986, 1717
Hathaway Instrument Div. 1879
Hathaway, A. G. 1459
Hathaway, C. M. 450
Haydon Co., A. W. 149, 150, 175, 1424
Haydon Div. 680
Hays Corp. 668, 1770
Heat Transfer Div. 1429
Heiland Div. 160, 882
Heise Bourdon Tube Co., Inc. 410
Heise, Otto W. 473
Heitz, Inc., Karl 315, 342, 538, 539, 702, 1239, 1412, 1571, 1719
Helicoid Gage Div. 2005
Helipot Corp. 1248
Heller Co., Gerald K. 312
Hemeon Associates 1622
Henderson, Robert E. 653
Henszey Co. 502
Herczeg, Louis 160
Hermann, P. J. 1692
Hermes Sonic 316
Hetherington, Inc. 146
Hewlett-Packard Co. 302, 322, 1098, 2010
Hexacon Electric Co. 342
Hietbrink, E. H. 1066
High Pressure Equipment Co., Inc. 1065
High Temperature Instruments Corp. 317, 515
High Vacuum Equipment Corp. 139, 539
High Voltage Engineering Corp. 336, 1252
Hill, L. C. 734
Hillburn Electronic Products Co. 168
Hines, C. K. 1688
Happe, R. W. 1389
Hoag, J. W. 986
Hobbs Corp., John W. 1562, 1716
Hobson Miller Machinery Corp. 369
Hoeppner, Conrad 119
Hoffman Electronics Corp. 1070, 1485, 1877
Hofmann & Co., Alfred 507, 601
Holdfeld, David 1389
Hoke, Inc. 333, 768, 936, 937, 984, 1429, 1556, 1885
Holcomb, Lowell A. 206, 1456, 1910
Holtzer-Cabot Motor Div. 166, 705, 1861
Holub Industries, Inc. 175
Homestrand Inc. 705, 938
Horwitz, R. D. 1204, 1845
Hostetler, D. E. 75
Howe Scale Co. 337, 1085
Hudson Tool & Die Co. 527
Hudson, Thomas R. 372
Huggins, Phyllis 1827
Hughes Products 1564, 1712
Humphrey, Inc. 342, 690, 896
Hunt, Herschel 1817
Hunter Mfg. Co. 535, 1720
Hurst Mfg. Co. 1858
Hycon Electronics, Inc. 693

I

Illinois Metal Products 1088
Illinois Testing Labs., Inc. 1394
Illinois Water Treatment Co. 1236
Illumitronic Engineering 526
Imperial Brass Mfg. Co. 152, 1240, 2006
Industrial Camera Div. 1930
Industrial Div. 324, 695, 756, 921, 1406, 1415, 1558, 1570, 1702, 1859
Industrial Electronic Engrg. 1068, 1070
Industrial Electronic Engineers 149, 1715
Industrial Gauges Corp. 317
Industrial Instruments Engrg. Corp. 539, 1562, 1769
Industrial Instruments, Inc. 1401, 1712, 1930
Industrial Nucleonics Corp. 1878
Industrial Products Div. 1700, 1862
Industrial & Scientific Products Div. 680
Industrial Test Equipment 539, 1099
Industrial Timer Corp. 312, 508
Industrial Transformer Corp. 320
Inland Electronics Corp. 1562
Inso Products, Ltd. 1860
Instrument Development Labs., Inc. 1238
Instrument Div. 128, 160, 314, 321, 695, 1408, 1552, 1575
Instruments, Inc. 128, 668
International Business Machines Corp. 497
Int'l Instrument, Inc. 322
International Rectifier Corp. 175, 176, 327, 336, 526, 697, 705, 920, 1414
International Register Co. 1552
International Resistance Co. 144, 302, 705, 1233, 1404, 1409, 1770, 1874
International Tel. and Tel. Corp. 1700
Invar Electronics Co. 705
Ion Exchange Products, Inc. 342, 702
Ipsen Industries, Inc. 1708
Ireland, H. M. 1064
Irving, James R. 201, 1805
Isbell, G. M. 1278
Isenhour, N. L. 76
Isotopes Specialties Co. 902

J

JFD Electronics Corp. 1698
Jackes-Evans Mfg. Co. 1563, 1854
Jackson, Kenneth R. 373
Jackson, Warren 1992
Jamesbury Corp. 334, 533
Jarrell-Ash Co. 512
Jeppson, Morris R. 639
Jerber Engineering Co. 1084
Jerguson Gage & Valve Co. 151
Johnson Corp. 930
Johnson Engrg., Welton V. 50
Johnson, R. Curtis 90
Johnson, Robert S. 1063
Johnson, W. R. 1840
Johnson, William F. 846
Jones & Wettlaufer Engineering Corp. 1706
Jones, Chalmer E. 86
Jordan Co., Inc. 329, 700, 1050
Jordan Electronics Div. 315, 898, 1252, 1408
Jordan Industrial Sales Div. 168, 332, 334, 706, 930, 1093, 1099
Joy Mfg. Co. 542
Julie Research Labs., Inc. 1161

K

Kahn and Co., Inc. 338, 689, 1721
Karsten, Arnold J. 273
Kates Co., W. A. 1857
Kato Engineering Co. 342, 705
Kaufman, Alvin B. 200, 1262, 1912
Kearfott Co., Inc. 176, 923, 1090, 1099, 1236, 1404, 1620, 1720
Keinath, George 827, 854
Kelley, Thomas J. 1819
Kennedy, Jerome 1389, 1692
Kennedy, W. J. 1537
Kerley, J. G. 77
Keseluk, George 203
Keystone Engineering Co. 1292
Kezer, Charles F. 174, 860, 1056, 1421, 1529, 1698, 1851, 1987
Kiley, M. Marcus 374, 961, 1063
Kimball Co., A. 1078
Kindle, Bill 1748
Kinetrol Co. 157
King Engineering Corp. 1235
King, Ralph 1992
Kin Tel 170, 321, 917, 1068, 1073
Kirkland Co., H. R. 930
Kistler Instrument 680
Klein, Dr. Martin E. 736
Kleiss, N. J., Captain USN 1280
Knopp Inc. 319
Kohr, Robert 1991, 1992
Kollmorgen Optical Corp. 567
Krohn-Hite Corp. 1719
Krusen, Norman L. 733
Kuhlman, E. J. 733
Kunkle, D. E. 75
Kurman Electric Div. 535, 698, 903, 1701
Kybernetes Div. 1771, 1875

L

L & L Mfg. Co. 176
Labline, Inc. 319, 1254
Lafontaine, John F. 1975
Lambda Electronics Corp. 1099
Land-Air, Inc. 1718, 2003
Landis & Gyr, Inc. 151, 1074
Largent Co. 892
Larrowe, Vernon L. 1066, 1694
Latowski, A. A. 271
Lauber, Verlin 653
Lawler-Wilson, Clive 293
Lax, Charles 1832
Lear, Inc. 1161, 1720
Lee Electric and Mfg. Co. 537
Leeds & Northrup Co. 128, 408, 1250, 1884, 1999
LeGette, M. A. 447
Lenz Electric Mfg. Co. 1056
Lepel High Frequency Labs., Inc. 1402
Levenick, Richard L. 965
Levin & Son, Louis (Inc.) 539, 904, 1087
Levine, Leon 1221
Levinthal Electronic Products, Inc. 314, 691, 706
Lewis, Lloyd G. 641, 653
Librascope, Inc. 1099, 1150, 1712, 1853
Liggitt, Earle O. 201
Linde Co. Div. 171
Lindly & Co. 882
Line Electric Co. 508, 922
Linemaster Switch Corp. 1859
Ling Electronics, Inc. 1700
Lipps Engineering 706, 1563
Liquidmeter Corp. 1424
Lisk, R. C. 661
Litton Industries 992
Litton Industries Components Div. 699
Lockhart, Harry H. 1686
Loe Engineering Co. 2012
Lonergan, G. P. 734
Loomis, Henry 1131
Lovejoy Flexible Coupling Co. 530
Lucifer Furnaces, Inc. 176

M

MB Mfg. Co. 318
MPB, Inc. 926
Macbeth Instrument 539
Machinery Electrification, Inc. 306, 539
Mack Electronics 691
MacPherson, D. D. 95
Macurdy, L. R. 1973
Madigan, James F. 654
Magnaflux Corp. 170
Magnatrol Valve Corp. 928
Magnecord Div. 915, 1099
Magnecraft Electric 698
Magnetic Materials Section 316
Magnetic Research Corp. 674
Magnetic Shields Div. 1567
Magnetics, Inc. 767
Mag-Tran Sales Corp. 238
Mallory & Co., Inc., P. R. 18[illegible]
Mandrel Industrial Instruments 165, 310, 329, 1706, 1856
Manning, Maxwell & Moore 756, 1230, 1425, 1699

Manostat Corp 528
Mantex Inc 1228
Manton-Gaulin Mfg Co 319
Manufacturers Engineering & Equipment Corp 139, 169, 170, 512
Marion Electrical Instrument Co 1254, 1406
Markey, Frank J 280
Markson, A A 616
Marsh Instrument Co 502
Marshall Instruments, Inc 1858
Martin-Decker Corp 142
Marton, Fred D 867, 1053, 1839
Masheter, W L 1060
Mason Instrument Co 1719
Mason Neilan Div 2014
Massa Laboratories, Inc 938, 1712
Master Addresser Co 539
MasterSon Engineering Co 1090
Maurey Instrument Corp 525
Maxson Corp, W L 527
McCallum, James D 735
McCarty, M D 1278
McClintock Mfg Co 514
McDonnel & Miller, Inc 1878
McGraw-Edison Co 703, 1404
McHugh, William 735
McIntosh Equipment Corp 1721
McKnight, G W 98
McLeod, John H 119, 297, 487, 651, 852, 877, 1039, 1063, 1219, 1385, 1543, 1691, 1845
Measurements Div 1404
Mechatrol Div 1425
Medwied, M 1278
Meissner, Loren P 651
Meissinger, Hans 1546
Mellen, E R 74
Mercoid Corp 1721
Metals & Controls Corp 30, 242, 538, 893
Meter Div 522, 1698
Methods Research Corp 1704
Metron Corp 1401
Metron Instrument Co 531, 603
Michaels, F 1366
Microchemical Specialties Co 315
Microdot, Inc 699
Microline Products Group, Ozalid Div 1571
Micro Switch 137, 328, 1719
Micro Test, Inc 401, 685, 2004
Micro Time Inc 1704
Microwave Div 1404
Mid-Century Instrument Corp 126, 885, 1076, 1872
Midwestern Instruments 915, 1099, 1425, 1427
Miller Instrument Co 692, 706
Miller, Dave 652
Milliken Co, D B 1239
Millitest Co 692
Millivac Instruments Div 1406
Milman Engineering Co 303
Milton Roy Co 129
Minard, R A 1212
Mine Safety Appliances Co 342, 498, 772, 903, 1080, 1702
Minneapolis-Honeywell Regulator Co 128, 130, 160, 329, 882, 894, 1076, 1078, 1082, 1238, 1719, 1872, 2000
Missouri Research Labs 706
Mittlemann, Eugene 566
Modern Industries, Inc 918
Molex Products Co 925
Monroe Calculating Machine Co, Inc 1238
Moore Associates, Inc 4080
Moore & Co, Samuel 1712
Morehouse Machine Co 2009
Moreland, W J 1995
Morganite Inc 907
Morrow, L M 1214
Moseley Co, F L 885, 1424, 1560
Moseley, F L 849
Moses Electronics Co 885
Motech Co 1854
Moyer, Lloyd 838
Multicore Sales Corp 176
Murray, James E 1753
Murray, Warren A 1389

N

NJE Corp 1245, 1427
NRD Instrument Div 540, 701, 1070
NYT Electronics, Inc 1555
Nankervis Co, George L 673, 896, 1861
Narda Ultrasonics Corp 1576
National Appliance Co 139, 176, 343, 539, 1253
National Bureau of Standards 206
National Carbon Co 38
National Carbon Div 1100
National Cash Register Co 494
National Company, Inc 530
National Instrument Co 135, 1085
National Instrument Labs, Inc 897
National Pneumatic Co, Inc 1861
Navigation Computer Corp 1858
Nelson Instrument Co 539, 701
Nester Co, Inc, L G 1254
Ney Co, J M 1859
Newage Industries, Inc 155
Newark Controls Co 308
New York Air Brake Co 1095
Niagara Blower Co 339, 1426
Niagara Electrical Instrument Co 320
Nigro, James 1543
Noble & Westbrook Mfg Co 514
Non-Linear Systems, Inc 323, 1076, 1424
Norbute Corp 1701
Norcross Corp 128, 1880
Norden-Ketay Corp 171, 897
Norgren Co, C A 1560
North American Electronics, Inc 1873
North American Mfg Co 1230
North Atlantic Industries, Inc 1560
Northam Electronics, Inc 304, 313, 677, 938
Northeast Electronics Corp 312
Northeastern Engineering Lab 1074
Norwood Controls Div 1150, 1702, 1882, 1939
Nuclear-Chicago Corp 343, 902
Nuclear Corp of America 1070
Nuclear Div 706
Nuclear Measurements Corp 315, 343, 511, 682, 1100, 1560
Nucledyne Corp 596
Nucleonic Products Co 677
Nylon Molding Corp 700

O

OPW Corp 332, 930, 1093, 1099
Oak Mfg Co 1572
Offner Electronics, Inc 522
Ohio Semiconductors, Inc 1864
Ohmart Corp 890, 1480
Ohmite Mfg Co 695, 1874
Okonite Co 1934
O'Lone, C J 1841
Omega Machine Co 1085
O'Neil Irwin Mfg Co 938
Opad Electric Co 176, 524, 917
Optimized Devices, Inc 322, 912, 921
OPTOmechanisms Incorporated 140, 933
Opto-Metric Tools 515, 686, 706, 1088, 1402
Osborne Electronics Corp 1100, 1246
Oskay, John J 8
Oster Mfg Co, John 527, 899, 1244, 1571, 1876
Ott, Henry E 200
Owen Labs, Inc 1575
Oxley Co 1090

P

PCA Electronics Inc 921, 1092
P & H Electronics, Inc 1573
P & H Sales Corp 1095
PIC Design Corp 177, 331, 531, 540, 938, 1092, 1100, 1873
Pace Engineering Co 188
Pacific Semiconductors 697
Pacific Transducer Corp 1252
Packard-Bell Computer Corp 176, 304, 1238, 1721, 2070
Paletsky, Max 1836
Palisades Engineering Co, Inc 1862
Palmer, E S 1278
Palo Laboratory Supplies, Inc 315, 1558
Pameco 322
Panalarm Div 1562
Panduit Corp 1704
Panellit, Inc 992, 1100, 1392, 1562
Panoramic Radio Products, Inc 1242
Parabam, Inc 1073
Paragon Electric Co 1864
Parametrics 700
Parker Fittings & Hose Div 1883
Parker-Hannifin Corp 540, 1100, 1883
Parker, William 1694
Parks Electronics Corp 527
Parsons, Alonzo R 851
Partlow Corp 133, 238, 308, 333, 885, 1854, 1939
Pass & Seymour, Inc 925
Pease Co, C F 1708
Pease, Keith 200
Pee-Wee Molding Corp 700
Penfield Mfg Co 170
Penna Fluorocarbon Co, Inc 540
Percy, J Ward 77
Perfection Mica Co 1567
Performance Measurements Co 1877
Perkin Engineering Corp 165, 525, 706
Perkins Machine and Gear Co 513
Permut, Lee 1198
Perschel Electronics, Inc 520, 1404
Peterson, A H 75
Peterson, Karl W 566, 1910
Petrovsky, Alex 971
Pfeffer, Irwin 1849
Philbrick Researchers, Inc, George A 671, 1244
Philco Corp 764 1076
Phillips & Hiss Co, Inc 306
Photo Research Corp 177, 337
Picker X-Ray Corp 1704
Pihl, George 841
Pike & Co, Inc, E W 1718
Pneumaticount 509
Polymer Corp of Pa 532
Polyphase Instrument Co 1573
Port Service Corp 1150
Porter, Inc, George K 1558
Portman Instrument Co 507
Post Electronic Products Div 177, 1880
Post Machinery Co 1880
Potter Aeronautical Corp 135, 310, 343
Potter Instrument Co, Inc 30, 303, 495, 343, 671, 1866
Potter & Brumfield, Inc 167, 234, 328, 343, 923, 1100, 1247
Power Designs, Inc 1861
Powerdex Co 343
Power Engineering & Equipment Co, Inc 1236
Powers Regulator Co 169, 504, 1094
Precise Development Corp 693
Precision Apparatus Co 911
Precision, Inc 938, 1244
Precision Magnetic Controls, Inc 2012
Precision Mechanism Co 128
Precision Scientific Co 540, 933, 1255
Precision Thermometer & Instrument Co 343, 1082, 1868
Precision Tube Co 344
Preis Engraving Machine Co, H P 1087
Premier Metal Products Co 931, 1427
Presin Co 1552
Pressure Switch Div 141, 1394
Prestoseal Mfg Corp 1078, 1558
Price, Eugen L 1127
Process Instruments Div 336
Production Instruments Div 1571, 1866
Proportioneers, Inc 504
Pulse Engineering 32
Pyburn, Roy W 853
Pyro-Electric, Inc 1870
Pyrometer Instrument Co 981, 1234

R

R F Div 886, 1100, 1568
RKL Valve & Mfg Co 169
Radiation Counter Laboratories 42, 1577
Radiation, Inc 1401
Radio Corp of America 139, 344, 1243, 1246, 1571
Radio Frequency Labs 670, 693, 1068
Radio Receptor Co, Inc 327, 344, 919
Rafield, Phillip I 1832
Rahm Instruments Div 540
Ramapo Instrument Co, Inc 1085
Ramo Wooldridge 594
Randolph Co 370
Ransom Research 915
Rantec Corp 327, 522, 1572
Rapid Electric Co 914
Rapidesign, Inc 534, 702, 706, 932, 1255, 1569
Rasco, J Boyce 737
Rawco Instruments Inc 916
R-B-M Div 1098
Rectifier Div 2014
Reeve Electronics, Inc 933
Reeves Instrument Corp 331, 507, 927
Reeves Soundcraft Corp 1424
Reid Metal Products, Inc 1571
Reliance Gauge Column Co 1706
Renbrandt, Inc 1704
Republic Flow Meters Co 242, 898
Research Appliance Co 1241, 1942
Research & Development Div 986
Research Engineering Co 1094
Research, Inc 1558, 1866, 2011
Research Vacuum Supply Co 707
Resistor Networks, Inc Div 1161
Revco, Inc 680
Revere Corp of America 537, 1864
Rheem Mfg Co 1573
Richardson, Ingram H 1987
Richmond Engineering Co, Inc 339
Riggs Nucleonics Co 701, 1868
Rimbach, Richard 106
Rinear, Robert T 372
Rixon Electronics, Inc 1162
Robbins Aviation, Inc 1802
Roberts, H C 76
Robertshaw-Fulton Regulator Co 128, 167, 177, 314, 321, 335, 501, 1410, 1864
Robertson, Rupert C 1126
Rochester Div 142, 174, 935, 1254 1255
Rockwell Co, W S 245, 1415
Rockwell Mfg Co 1397
Rogers, Stanley 1039
Roney, Dr Robert K 1546
Rose, Arthur 90
Rosemount Engineering Co 1868
Ross, S D 734
Routillion, Louis H 373
Routh, Don 1991, 1992
Rouvalis, G 1691
Rovany and Associates, Inc, W G 333, 1569
Royal McBee Corp 2010
Royson Engineering 163, 1070
Rubicon Instruments Div 1872
Rust Industrial Co, Inc 883
Rutherford Electronics Co 1242
Rutishauser, Rudolph 1223
Rutledge, George A 850

S

Sadler, E J 848
Sanborn Co 32, 324, 695, 1406, 1558, 1570, 1859
Santa Barbara Instrumentation Corp 1879
Sargent & Co, E H 1864
Sargent Electric Corp 540
Sarkes Tarzian, Inc 2014
Sattinger, I J 1991
Sayler, Max W 1066
Scam Instrument Corp 1080, 1392, 1402, 2015
Schaevitz Engineering 145, 2013
Schaffer, George M 964
Scherr Co, Inc, George 317, 344, 938, 1870, 1875
Schivley, Girard 469
Schmidt, J H 730
Schrag, Dr Robert L 1388
Schratz, W A 373
Schwidetzky, Dr Walter 1845
Scientific Glass Apparatus Co, Inc 903
Scientific Instruments Div 304
Scott Testers, Inc 318, 540, 690, 2008
Scott, Clyde C 636
Seico Instrument Div 1083, 1620
Selas Corp of America 408, 1878
Semiconductor Div 344, 1070, 1483, 1877
Semiconductor and Materials Div 1246
Seneca Falls Machine Co 1879
Senior, D A 1044
Sensitive Research Instrument Co 594 913, 1243, 1698, 1769
Serdex, Inc 309, 535, 1082
Servo Corp of America 1234
Servomechanisms, Inc 540, 1396, 1425
Servonic Instruments, Inc 527
Servo-Systems Co 530
Servo-Tek Products Co, Inc 1090, 2004
Shallcross Mfg Co 163
Shapiro, H J 1198
Sharon Steel Corp 283
Shaw Instrument Corp 2007
Shelley, Michael K 1515
Shore Instrument & Mfg Co 1089
Sigl, Robert L 265
Sigma Instruments, Inc 328
Simplatrol Products Corp 938
Simpson Electric Co 160, 322, 680, 692, 1429
Sinclair-Collins Valve Co 1570
Singer, E 1750
Skinner Electric Valve Div 335, 1094, 1410
Skramstad, Harold 1543
Slater, Lloyd 374
Slip Ring Co of America 1100
Smith Co, S Morgan 332, 1771
Smith Manufacturing Co, E C 764, 1872
Soiltest, Inc 157, 516, 910
Sola Electric Co 1410
Solartron, Inc 127
Solid State Electronics Co 707, 1092, 1480
Sonheim, Daniel 1224
Sorensen & Co, Inc 164, 320, 325, 326, 344, 541, 918, 1100, 1245, 1570
Soroban Engineering, Inc 396
Sounditronics Labs 927
Southwestern Industrial Electronics Co 312, 511, 525, 894, 1245, 1409, 1567, 1772, 1873, 2008
Spaulding, Carl P 1909
Special Chart Div 163
Special Screw Products Co 1306
Spence Engineering Co, Inc 152
Spencer Thermostat Div 30, 893
Spinco Div 139
Spivey, Inc, James S 1243
Split Ballbearing Div 926
Sprague, Philip A 973
Square D Co 146
Stackpole Carbon Co 327
Standard Electric Time Co 707
Standard Instrument Corp 1704
Standard Glassblowing Labs 1398
Statham Development Corp 908, 909, 1406
Statham Instruments, Inc 1236, 1429
Statham Labs 772
Stauter, George 734
Stearns Electric Corp 707, 922, 1246, 1868
Stein, Peter K 456
Stepper Motors Corp 1252
Sterling Precision Corp 924, 927, 1229, 1236, 1408, 1570
Stern, James 202
Stevens-Arnold, Inc 1247, 1860
Geo Stevens Mfg Co, Inc 152
Sticht Co, Inc, Herman H 1398
Stillman, L P 1531
Stokes Corp, F J 1485
Stow Mfg Co 177
Straight, P 1366
Studebaker Hydraulic Products Co 898
Sun Electric Corp 522
Sunnen Service Corp 154
Sunshine Scientific Instrument 1240
Superior Electric Co 325, 1100, 1409, 1716
Superior Tube Co 756
Sutton, Bruce 468
Swartwout Co 1875
Switchcraft, Inc 1246
Synchro Start Products, Inc 1870
Syntorque Inc 344
Syntron Co 594
Systems Div 306, 886
Systron Corp 126, 899, 1396

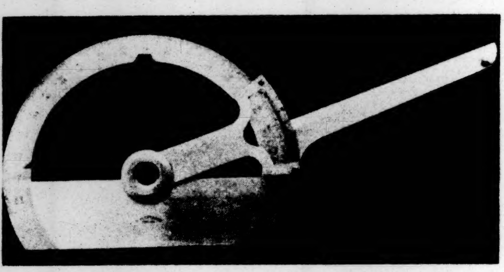
T

Taber Instrument Corp 163, 515, 1091
Taller & Cooper, Inc 1716
Taper Micrometer Corp 316
Taurus Corp 1310
Taylor Instrument Cos 678, 1569, 2002
Technical Associates 1252
Technical Products Div 2009
Technical Service Corp 1569
Technicon Controls, Inc 2014
Technicon Instrument Corp 1624
Technique Associates, Inc 160, 541, 1555
Techniques 1246
Technology Instrument Corp 1426
Technology Instrument Corp of Calif 1394, 1857
Tektronix, Inc 160, 177, 938
Telechrome Mfg Corp 508, 674, 707, 912, 938
Telco Sales Div 2004
Telecomputing Corp 929, 2004
Teleflex, Inc 1620
Telemeter Magnetics, Inc 127, 1074, 1079, 2006
Teletronics Laboratory, Inc 149, 541, 911, 1567
Teletype Corp 2010
Tel Instrument Electronics Corp 541, 1868, 2011
Tempo Instrument Inc 403
Ten Bosch, Inc, M 38
Tenney Engineering, Inc 908, 1228, 1429
Tensitron, Inc 155
Texas Instruments, Inc 126, 707, 888, 1234, 1410
Textron, Inc 318, 670, 910
Thayer Scale Corp 1881, 2006
Thermco Laboratories 129
Thermionic Corp 528
Thermo-Couple Products Co, Inc 1406
Thermo Electric Co, Inc 133, 988, 1234, 1872
Thermo Electric Mfg Co 344, 1086, 1392
Thermo Laboratories 1230
Theta Instrument Corp 514
Thias Engineering Associates 1238
Thomas Engrg, Inc, D W 892
Thomas Skinner, Inc 990
Thompson Products, Inc 1097
Thomson Industries, Inc 926, 927
Tigerman Engineering Co 498
Tinius Olsen Testing Machine Co 689
Tipptronic, Inc 892, 1152
Toledo Scale 901
Torolds, Inc 1878
Torsion Balance Co 315
Tracelab, Inc 314, 345, 510, 1706
Transdata 694
Trans Electronics, Inc 326, 911, 938, 1575
Transistor Applications, Inc 1706
Transitron Electronic Corp 541, 696
Transitron, Inc 519, 696
Transparent Products Co, Inc 345
Trans-Sonics, Inc 502
Trent, Inc 768
Triad Transformer Corp 707
Trico Machine Products Corp 1089
Trio Laboratories, Inc 323
Triplett Electrical Instrument Co 1856
Truck Scale & Res Corp 1710
Trump, Walter N 691
Turner, Joseph W 8
Tuttle, Ken 1848

U

Ulanet Co, George 893
Ultradyne, Inc 507, 707
Uniflow Valve Corp 1416, 1698, 1775
Unimax Switch Div 527
Union Carbide Corp 38, 171, 1100
Union Industrial Equipment Corp 1860
United Electric Controls Co 133, 308, 345, 541, 893, 930, 1397, 1429
United Electrodynamics 901
United Electronics Co 526
United Shoe Machine Corp 145
U S Components, Inc 1570, 1714
United States Controls Co 1084
U S Electrical Motors, Inc 1874
United States Gauge Div 984, 1394
United States Radium Corp 172, 345
Unitek Corp 1877
Universal Electronic Co 525, 1245, 1555, 1876
Universal Metal Hose Co 1248
Universal Scientific 509, 938
Universal Transistor Products Corp 345, 510
Updike, O L 77
Ushakov, V B 1810, 1961

METAL PROTRACTORS



Precision Instruments—Half and Whole Circle—with and without Micrometer Adjustment. Also special Protractors.

Catalog on request covering

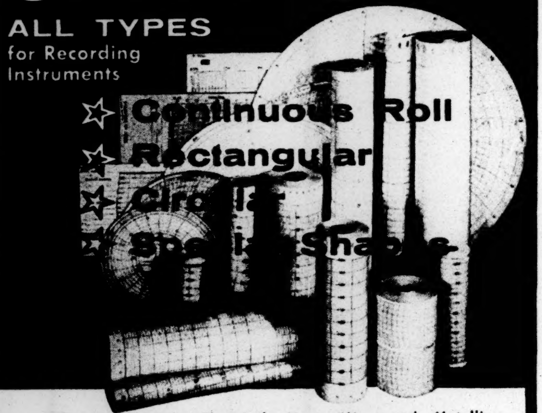
Drawing Instruments
Protractors
Rolling Parallel Rules
11 Pt. Spacing Dividers
Drafting Scales
S.S. Straightedges
S.S. T-Squares
S.S. Triangles
Circular & Linear Engraving

THEO. ALTENEDER & SONS
Makers of Fine Instruments Since 1850
1217 Spring Garden Street, Philadelphia 23, Pa.

For more information circle **125** on inquiry card.

GUBELMAN CHARTS

ALL TYPES
for Recording Instruments



Charts for Ink, Electrical, Heat, Wax and Metallic Stylus-Recording.

Special time numbering, perforations, and graphic design cycles available to meet unusual requirements.

All Charts are produced under automatically controlled atmospheric humidity conditions.

Our complete chart manufacturing facilities and wide experience have served and progressed with the instrument industry since 1908.

GUBELMAN CHARTS INCORPORATED
(FORMERLY NAMED GUBELMAN PUBLISHING CO.)
100-106 EAST KINNEY STREET, NEWARK 5, N. J.

V

Vacuum Equipment Div. 1095
Vacuum Specialties Co., Inc. 585
Vacuum Tube Products 916
Valcor Engineering Corp. 700, 928
Valvair Corp. 1249
Van Artsdalen, James 1909
Vanguard Instrument Corp. 1878
Van Norman Industries, Inc. 345
Vanton Pump and Equipment Corp. 30, 335
Vapor Recovery Systems Co. 901, 1238, 1402
Varian Associates 756, 898, 1100
Varner, Walter 1845
Vector Electronic Co. 345, 685, 1079
Veeco Vacuum Corp. 306, 333, 929, 1100, 1564, 1876
Veeder-Root, Inc. 900, 1074, 1427
Vibrapower Co. 1099
Vickers, Inc. 327
Vickery Co. 1250
Victor Adding Machine Co. 990
Victor Equipment Co. 1702
Victoreen Instrument Co. 541, 697, 700, 898, 920, 938, 1252
Victory Engineering Corp. 1870
Viking Industries, Inc. 331, 699
Viking Tool & Machine Corp. 166, 699
Vinson Mfg. Co. 930
Vitramon, Inc. 541, 919
Vogt, E. G. 267
Viltron Products 1090
von Wiese Gear Co. 1572

W

Walker Crosweller Div. 1721
Walker, J. K. 1688
Wallace & Tiernan, Inc. 42, 151, 1084, 1306, 1485, 2009
Walli, Chuck 1691, 1694
Walser, John T. 1913
Wang Laboratories, Inc. 150, 670, 764
Ward Leonard Electric Co. 1864
Ward, F. S. 969
Warshawsky, Milt 1848
Warwick Products Co. 1414
Wasilk, Harold 1991
Waterman Engineering Co. 1236
Waterman Products Co., Inc. 1406, 1567, 1870
Waters Corp. 304
Waters Mfg., Inc. 707
Watts Regulator Co. 332
Waugh Engineering Co. 310, 680, 1415
Waxman, A. 872
Webber Corp. 690, 1790
Weber, C. G. 1839
Webster, R. R. 276
Weckesser Co. 345
Weighing & Control Components 900, 1392
Weksler Instruments Corp. 1082, 1870
Weldmatic Div. 685, 1877
Wendland, Donald E. 1389
Werboos, Walter J. 566
West Instrument Corp. 678, 883, 1873
Western Design & Mfg. Corp. 1568
Western Devices, Inc. 1570
Western Div. 922
Western Gear Corp. 1100
Western Instruments 1230
Western Lithograph Co. 686
Westinghouse Electric Corp. 668
Westline Products Div. 686
Weston Electrical Instrument Corp. 132
Weston Instruments Div. 541, 1234, 1243, 1426, 1552, 1875
Westport Electric 899
Westronics, Inc. 668, 886, 1100, 1415, 1568
Wheelco Instruments Div. 669, 1552
Wheeler Mfg. Co., C. H. 1624, 1713
Whitaker Controls Div. 929
White Instrument Labs. 1853
White, Byron 729, 862
Wiancko Engineering Co. 1426
Wilkens-Anderson Co. 692
Wilks, Paul A. 84
Williams, Fred 1548
Williams, James B. 624
Williams, Theodore J. 30
Williams, Van Zandt 84
Wilmad Glass Co. 682
Wilson & Co., G. C. 899
Wilson Mechanical Instrument Div. 907
Wirt Co. 1097
Withers, Jack 1840
Worley, C. W. 571
Worthington Corp. 2014
Wright, M.D., J. Leo 1751

Y

Yaeger, Bob 1543, 1385
Yard, Roderick 1682
Young, A. J. 200

Z

Zero Mfg. Co. 1570
Zeus Engineering Co., Inc. 320
Zierich Mfg. Corp. 1856
Zippertubing Co. 924, 1570, 1721
Zoomer, Inc. 1100

BOOK REVIEWS

Automatic Control, Principles and Practice 1328
Automtaic Control Technology, Modern Theories and their Usefulness 436
Automatic Process Control 1328
Automation & Management 1026
Automatisme Regulation Automatique, Servomechanismes 1645

Basic Motion Timestudy 1026
Basics of Digital Computers 1328

Computing Laboratory in the University 1785
Control Engineers' Handbook 1328

Digital Differential Analyzers 1785
Digital Techniques for Computation and Control 1503
Dynamic Characteristics, Plant and Process 1785

Electrical Discharges in Gases 1785
Electronic Measuring Instruments 1329
Encyclopedia of Instrumentation for Industrial Hygiene 436
Engineering Formulas & Tables 1026
Engineering Systems Analysis 1593

Feedback Control Systems 1645

Graphical Symbols for Fluid Power Diagrams 1955

Handbook of Automation, Computation and Control 1781
Handbook of Calculus, Difference and Differential Equations 1645
Handbook of Electronic Measurements 1503
How to Read Schematic Diagrams 1645

Industrial Control Circuits 1026
Industrial Electronics Circuits 1026
Industrial Electronics Handbook 1329
Instrumentation, Technology of 1781
Insulation Testing by D-C Methods 1955
International Dictionary of Physics & Electronics 1026
Introduction to the Design of Servomechanisms 1781
Introduction to Symbolic Logic and its Applications 1955

Lectures on Strain Gage Techniques 1503
Logical Design of Digital Computers 1645

Magnet Handbook, Permanent 1781
Magnetic Recording Techniques 1785

Nichtlineare Regelungsvorgange 1955

Preparation of Programs for an Electronic Digital Computer 1329
Principles of Electrical Measurements 1645
Principles and Practice of Flow Meter Engineering 1328
Process Instruments and Controls Handbook 1329
Punched Cards, Their Application to Science and Industry 1955

Static Control Application Manual 1785
Strain Gage Instrumentation 1781
Strain Gage Techniques 436

Techniques of Magnetic Recording 1503
Tracer Applications for the Study of Organic Reactors 1645
Transistor Manual 1645

Van Nostrand's Scientific Encyclopedia 1329

BOOK AUTHORS

Aronson, Milton H. 1502, 1781

Bailey, Gerald B. 1026
Banner, E. H. W. 1329
Barr, Jr., John G. 1645
Berry, Madeline M. 1955
Bower, John L. 1781
Bright, James R. 1026
Broida, V. 1645
Buckingham, H. 1645
Byers, D. H. 436

Carnap, Rudolf 1955
Casey, Robert S. 1955
Cogan, Edward J. 1645
Considine, Douglas M. 1329
Curdts, E. B. 1955

Eckman, Donald P. 1328

Forbes, George F. 1785

Gill, Stanley 1329
Grabbe, Eugene M. 1781

Hahn, Dr. Wolfgang 1955
Hammer, Preston C. 1785
Holzbock, Werner G. 1328
Hosey, A. D. 436

Kent, Allen 1955
Klein, Martin 1502
Kretzmann, R. 1026, 1329

Mark, David 1645
Michels, Walter C. 1026
Morgan, Harry 1502
Mueller, Gerd 436
Murphy, John S. 1328, 1785
Murray, W. M. 436, 1503

Nelson, R. C. 1781
Norman, Robert Z. 1645

Pearson, Eric B. 1781
Penning, F. M. 1785
Perry, James W. 1955
Phister, Jr., Montgomery 1645
Platt, Sidney 1026
Presgrove, Ralph 1026
Price, E. M. 1645

Ramo, Simon 1781

Schultheis, Peter M. 1781
Smith, Otto J. M. 1645
Spink, L. K. 1328
Stein, P. K. 436, 1503
Stewart, W. Earl 1785
Sutherland, Robert L. 1502

Tall, Joel 1503
Truxal, John G. 1328

Underhill, Earl M. 1781

Verlag, R. Oldenbourg 1955

Wheeler, David J. 1329
Wilkes, Maurice V. 1329
Wind, Moe 1503
Wooldridge, Dean E. 1781

Yaffe, C. D. 436